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ADP MASTER PLAN

Volume II

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1981-82 BUDGET ANALYSIS

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Richard D. Lamm, Governor

R. Garrett Mitchell, Executive Director

Department of Administration

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* EXCLUDING HIGHER EDUCATION

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A. INTRODUCTION

In arriving at the budget recommendations for Fiscal Year 1981-82, the Division of Automated Data Processing reviewed the budget requests of all the State agencies and institutions and determined the resources required to maintain the existing levels of support and meet the increased costs due to inflation and increases in workload.

In addition to these on-going requirements the Division of ADP has identified certain new items, which have been prioritized below. These are necessary to continue the progress previously made in the implementation of the State's ADP Master Plan, and to improve data processing services. In some cases offsetting savings are shown which can be realized immediately.

These priorities have been established in two lists, one for all agencies other than Higher Education and another for Higher Education. This has proven to be more effective than a single list because the two groups are usually considered separately and independently by the Legislative and Joint Budget Committee analysts. For detailed information on the items prioritized, as well as for general information on the various State agencies' budgets, you are directed to the individual budget documents and budget analysis sheets for each agency. (See Section III)

B. PRIORITIES - ALL AGENCIES EXCEPT HIGHER EDUCATION

	COST	
	General Fund	Cash
PRIORITY - 1:		
. Continued support for the Department of Revenue to implement the recommendations in the 1980 ADP Master Plan Volume III, entitled Revenue Data Processing Task Force Study		
- Software to support upgrading the operating system to the "state-of-the-art".	$ 18,883	$ 25,683

	COST General Fund	COST Cash
- Additional disk storage to support the conversion to the new operating system.	$ 34,226	$ 46,554
- Additional disk storage to support normal growth in the various programs.	$ 44,350	$ 60,248
- One software programmer FTE to assist in upgrading the computer operation to the "state-of-the-art".	$ 11,359	$ 8,542
- System software to monitor and tune the system to improve performance.	$ 11,864	$ 16,136
. Increase in operating expense for the Department of Institutions due to the vendor's unbundling of software and maintenance plus an average 15% increase in maintenance charges.	$ 28,592	
. Increase in the Judicial Departments operating expenses to cover the data entry services at the General Government Computer Center.	$ 30,800	
PRIORITY - 2:		
. The transfer of 3 FTE within the Department of Institutions, from the Division of Mental Health to data processing. The 3 FTE are currently funded by Mental Health but are on loan to the Tab shop at Fort Logan. The Department has requested 3 new FTE at a cost of $32,148.	-0-	
. The transfer of four systems development FTE from the General Government Computer Center to the following agencies: - Division of Labor (2) - Department of State (1) - Department of Local Affairs (1)	-0-	

	COST General Fund	COST Cash
. One new data entry FTE and rental for 1 CGS terminal for the Department of Regulatory Agencies. This request will reduce the Departments net cost for data entry and reduce the overload at the General Government Computer Center.	$ (1,263)	
PRIORITY - 3:		
. Fire detection and extinguishing system for the Department of Revenue computer room.	$ 23,304	$ 31,696
. Acquisition of a microprocessor and printer by the Department of Military Affairs to improve the effectiveness of the Emergency Operations Center.	$ 5,000	
. Initiate a distributed data entry system for the COIN project in the Department of Social Services. The data entry function would be accomplished at the County level using mincomputers. Federal participation on a 90/10 basis should be pursued.	$ 8,250	
PRIORITY - 4:		
. The purchase by the Department of Treasury of statistical multiplexor modems for their terminals that are connected to the HP-3000 computer at the Department of Education.	$ 7,500	
. Continued support for the conversion of the TAB shop at Fort Logan to a distributive processing system by the Department of Institutions.	$ 39,849	

	COST General Fund	Cash
. Additional memory and disk storage for the Univac 1100/60 at the Colorado Bureau of Investigation.	$ 47,484	
. Additional disk storage for the Department of Regulatory Agencies computer.	$ 35,375	
. Upgrade disk storage for the Department of Health Radiation Division mini-computer.		
PRIORITY - 5:		
. One systems analyst FTE to support the Department of Health Air Pollution Division in their endeavor to improve informational processing.	$ 20,896	
. One programmer FTE for the Department of Corrections to maintain and enhance the existing applications.	$ 19,900	
. One Program Management Information Specialist FTE to aid in the development of a Program Management Information System for the Department of Institutions.	$ 22,656	
PRIORITY - 6:		
. One Systems Analyst and one Programmer FTE for the Division of Labor of Department of Labor.	$ 45,348	
. One Systems Analyst and two programmer FTE's for the Division of Compensation Insurance.	$ 68,674	

	COST General Fund	COST Cash
PRIORITY - 7:		
. Additional disk storage for the Department of Institutions	$ 16,044	
. Replace existing tape drives and controller for the Department of Institutions.	$ 14,531	
. Replacement program for magnetic tapes in the Department of Revenue.	$ 8,209	$ 11,166
. Expand communications network for the Colorado Bureau of Investigation.	$ 18,835	
PRIORITY - 8:		
. Five data entry FTE's to support the Department of Revenue's normal growth and additional projects.	$ 23,062	$ 28,370
. Increase of 6.25 FTE for the Department of Law to assume the typing load from the departmental secretaries through word processing system.	$ 139,522	
. Subscription to Westlaw case law data system for the Department of Law.	$ 19,260	
. One typist FTE to handle increased workload for the Department of Institutions.	$ 5,436	
. One clerical/secretarial FTE for the Colorado Bureau of Investigation.	$ 14,137	
. One systems analyst and one programmer FTE for the Department of Institutions.	$ 37,250	

	COST General Fund	COST Cash
. Replace worn out carrier vehicle for the Department of Revenue.	$ 3,526	$ 4,674
. One Manager of Operations FTE for the Department of Social Services.	$ 25,276	
TOTAL COST	$ 848,135	$ 239,069

C. PRIORITIES - HIGHER EDUCATION

All priorities are in addition to the ongoing and inflationary budget.

Individual institutional budget requests were reviewed by the Division of ADP and the Higher Education ADP Steering Committee. Recommendations are made for each institution on the detail budget forms. All recommendations were made on a need basis and did not necessarily address a 7% limitation. In this regard ADP is not treated as a program budget.

The column headed "Request" on the institutional "ADP Budget Analysis" forms is the Full Request as taken from the institutional budget submission. The column headed 7% Request from the formal budget document is not reflected in the budget analysis.

Inflationary increases to base budgets (Estimated expenditures) and previous year appropriations are required and incorporated in the individual recommendations. These increases while absolutely necessary to maintain current activities are not reflected as a priority item.

All recommendations by the Division of ADP for additional resources are not included in the priority list. While the individual institution may interpret its priority need equal to or greater than others, the evaluation of the priority list should be construed as exceptional or outstanding new needs.

The Higher Education ADP Steering Committee elected not to include the University of Colorado Medical Center in their deliberations, due to the specialized nature of that facility.

The following priority items are a product of the Divison of ADP. The ADP Steering Committee did not review or pass judgement on the priority listings.

	COST	
	General Fund	Cash
1. Metro State 1.0 FTE for development and coordination of the State Personnel System.		
Operating Expense	$ 22,000	

	COST General Fund	Cash
Fort Lewis (1.0 FTE)		
Common systems implementation and sharing among the 4 year institutions. and instructional coordination support for Fort Lewis users.		
Operating Expense	$ 20,676	
	$ 42,676	
2. Adams State (New Computer) 4 year pay plan.		
Capital Outlay	$ 60,000	
Operating Expense	19,259	
	$ 79,259	
3. Arapahoe Community college		
Continuation of computer expense. ($40,000 base)		
Capital Outlay	$ 54,000	
4. PVCC - Replacement Computer		
Capital Outlay	$ 15,000	
Operating Expense	5,410	
	$ 20,410	
5. University of Southern Colorado:		
New computing equipment under a 6 year pay plan		
Capital Outlay	$ 135,000	

	COST General Fund	Cash
Maintenance based on ½ year		
Operating Expense	$ 33,750	
1.0 FTE academic coordinator and 1.0 FTE programmer		
Operating Expense	50,400	
	$ 219,150	
6. Continuation for operation and maintenance of the Higher Education Financial Accounting System (HEFAS) project through the Community College of Denver.		
0.2 FTE (To make full time position with 0.8 appropriated last year		
Operating Expense	$ 5,386	
Operating Expense	4,500	
CRT for systems development		
Capital Outlay	$ 3,000	
CCD Appropriations	$ 12,886	
Additional disk and Terminals for CCD North instructional program.		
Capital Outlay	$ 29,000	
7. Transfer of General Funds from University of Colorado, (Colorado Springs and Denver) to University of Colorado, (Boulder) Change from cash income to General Fund at Boulder:		
General Fund reduction: (Base)		

	COST General Fund	Cash
University of Colorado, Colorado Springs		
Operating Expense	$ (31,000)	
University of Colorado, Denver		
Operating Expense	$ (40,000)	
University of Colorado, Boulder (Offset Cash)	$	(71,000)
Transfer from Cash to General Fund:		
University of Colorado, Boulder		
Operating Expense	$ 143,000	
Net General Fund Increase		
Operating Expense	$ 72,000	
8. AHEC Library System Community College of Denver. (North and Red Rocks		
Terminals		
Capital Outlay	$ 20,000	
Operating Expense	21,530	
	$ 42,531	
TOTAL	$ 517,912	(71,000)

STATEWIDE ADP HISTORICAL SUMMARY

	1970-71 ACTUAL	1971-72 ACTUAL	1972-73 ACTUAL	1973-74 ACTUAL	1974-75 ACTUAL	1975-76 ACTUAL	1976-77 ACTUAL
ADP FTE	802.8	851.0	844.2	883.1	967.5	929.5	993.8
ADP DOLLARS	12,425,597	14,948,381	14,953,759	17,906,408	24,206,235	22,677,878	29,956,097
% of STATEWIDE APPROPRIATION*	2.5	1.9	1.6	1.8	1.9	1.6	2.0
STATE APPROPRIATION*	495,174,679	795,335,825	903,891,288	1,000,838,959	1,248,380,899	1,381,664,521	1,516,768,292

	1977-78 ACTUAL	1978-79 ACTUAL	1979-80 ACTUAL	1980-81 ESTIMATED	1981-82 REQUEST	1981-82 RECOMMENDED
ADP FTE	1,029.89	1,018.65	1,022.17	1,074.5	1,164.9	1,141.2
ADP DOLLARS	29,644,589	33,090,330	41,470,617	41,890,662	47,467,683	42,851,274
% of STATEWIDE APPROPRIATION*	2.0	1.8	2.0	1.7		
STATE APPROPRIATION*	1,634,468,995	1,829,251,942	2,101,739,293	2,465,387,502		

*NOT INCLUDING CAPITAL CONSTRUCTION

STATE OF COLORADO

ADP SUMMARY

	1979-80 FTE	1979-80 ACTUAL $	1980-81 FTE	1980-81 ESTIMATE $	1981-82 FTE	1981-82 REQUEST $	1981-82 FTE	1981-82 RECOMEND. $
AGENCY OPERATED ADP								
PERSONAL SERVICES	664.57	12,165,160	706.50	14,025,779	757.20	14,982,376	758.20	15,090,619
OPER. EXP. (INCL. TRAVEL)		7,040,521		6,938,511		6,126,661		6,142,722
EQUIPMENT		7,196,900		6,726,584		6,624,714		6,550,464
TOTAL AGENCY OPERATED ADP	664.57	26,402,581	706.50	27,690,874	757.20	27,733,751	758.20	27,693,805
HIGHER EDUCATION								
PERSONAL SERVICES	357.60	7,055,417	368.00	8,130,937	407.70	9,014,961	383.00	8,447,873
OPER. EXP. (INCL. TRAVEL)		2,130,323		1,610,620		2,372,074		1,693,233
EQUIPMENT		5,882,296		4,458,231		8,346,897		5,016,363
TOTAL HIGHER EDUCATION	357.60	15,068,036	368.00	14,199,788	407.70	19,733,932	383.00	15,157,469
STATE TOTAL								
PERSONAL SERVICES	1,022.17	19,220,577	1,074.50	22,156,716	1,164.90	23,997,337	1,141.20	23,448,492
OPER. EXP. (INCL. TRAVEL)		9,170,844		8,549,131		8,498,735		7,835,955
EQUIPMENT		13,079,196		11,184,815		14,971,611		11,566,827
TOTAL	1,022.17	41,470,617	1,074.50	41,890,662	1,164.90	47,467,683	1,141.20	42,851,274

STATE OF COLORADO
AGENCY TOTALS BY SOURCE OF FUNDS

	1980-81 ESTIMATE			1981-82 REQUEST			1981-82 RECOMMENDED		
	TOTAL	GENERAL FUND	AUGMENTING REVENUE	TOTAL	GENERAL FUND	AUGMENTING REVENUE	TOTAL	GENERAL FUND	AUGMENTING REVENUE
AGENCY OPERATED ADP									
CORP. INSURANCE FUND	970,007		970,007	1,137,118		1,137,118	1,137,118		1,137,118
DEPARTMENT OF AGRICULTURE	12,078	12,078		12,078	12,078		12,078	12,078	
DEPARTMENT OF EDUCATION	393,847	327,199	66,648	400,312	338,346	61,966	400,312	338,346	61,966
DEPARTMENT OF HEALTH	764,947	555,564	209,383	836,655	600,229	236,426	836,655	600,229	236,426
DEPARTMENT OF HIGHWAYS	2,255,901		2,255,901	2,258,408		2,258,408	2,258,408		2,258,408
DEPARTMENT OF INSTITUTIONS	1,047,975	1,003,758	44,217	1,243,981	1,199,764	44,217	1,243,981	1,199,764	44,217
DEPARTMENT OF LAW	471,947	471,947		480,969	480,969		480,969	480,969	
DEPARTMENT OF PERSONNEL	181,078	181,078		188,335	188,335		188,335	188,335	
DEPARTMENT OF REVENUE	4,720,354	2,359,095	2,361,259	5,191,276	2,345,177	2,846,099	5,191,276	2,345,177	2,846,099
DEPARTMENT OF STATE	172,095	172,095		110,391	110,391		105,052	105,052	
DEPARTMENT OF TREASURY	62,447	62,447		40,684	40,684		40,684	40,684	
DEPT. OF CORRECTIONS	371,270	371,270		410,071	410,071		410,071	410,071	
DEPT. OF LOC. AFF. CBI	1,723,432	1,122,536	600,896	1,859,581	1,233,257	626,324	1,888,266	1,259,942	628,324
DEPT. OF LOC. AFF. CRIMINAL	37,049	18,524	18,525	65,083		65,083	65,083		65,083
DEPT. OF LOC. AFF. EXECUTIVE	50,103	50,103		51,398	51,398		51,398	51,398	
DEPT. OF LOC. AFF. LOCAL GOV	27,637	27,637		27,420	27,420		27,420	27,420	
DEPT. OF LOC. AFF. PLANNING	255,245	246,909	8,336	80,280	34,999	45,281	80,280	34,999	45,281
DEPT. OF LOC. AFF. PROPERTY	57,923	57,923		76,747	76,747		58,389	58,389	
DEPT. OF MILITARY AFFAIRS	2,316	2,316		7,316	7,316		7,316	7,316	
DEPT. OF NAT. RES. ADMIN.	281,709	24,398	257,311	285,875	26,256	259,619	285,875	26,256	259,619
DEPT. OF NAT. RES. WATER	137,546	99,033	38,513	153,300	114,787	38,513	153,300	114,787	38,513
DEPT. OF PLANNING & BUDGET	38,760	38,760					21,486	21,486	
DEPT. OF REGULATORY AGENCIES	474,242	164,117	310,125	424,003	167,887	256,116	424,003	167,887	256,116
DEPT. OF SOCIAL SERVICES	3,164,076	968,853	2,195,223	2,563,169	1,291,481	1,271,688	2,487,653	1,216,693	1,270,960
DIVISION OF EMPLOYMENT	4,168,148		4,168,148	3,653,271		3,653,271	3,653,271		3,653,271
DIVISION OF LABOR	245,588	157,776	87,812	279,451	188,451	91,000	254,747	163,747	91,000
GEN GOVT COMPUTER CENTER	4,293,174	3,559,761	733,413	4,506,034	3,746,807	759,227	4,506,034	3,746,807	759,227
GENERAL ASSEMBLY	306,500	306,500		272,400	272,400		272,400	272,400	
JUDICIAL BRANCH	669,549	564,549	105,000	764,337	764,337		795,137	795,137	
LEGISLATIVE COUNCIL	47,916	47,916		54,863	54,863		54,863	54,863	
LEGISLATIVE DRAFTING OFFICE	284,395	284,395		291,285	291,285		291,285	291,285	
OFFICE OF STATE AUDITOR	1,620	1,620		7,660	7,660		7,660	7,660	
TOTAL AGENCY OPERATED ADP	27,690,874	13,260,157	14,430,717	27,733,751	14,083,395	13,650,356	27,693,805	14,044,177	13,649,628
TOTAL HIGHER EDUCATION	14,199,788	12,046,469	2,153,319	19,733,932	17,601,010	2,132,922	15,157,469	13,187,547	1,969,922
STATE TOTALS	41,890,662	25,306,626	16,584,036	47,467,683	31,684,405	15,783,278	42,851,274	27,231,724	15,619,550

STATE OF COLORADO
AGENCY TOTALS BY SOURCE OF FUNDS

	1980-81 ESTIMATE			1981-82 REQUEST			1981-82 RECOMMENDED		
	TOTAL	GENERAL FUND	AUGMENTING REVENUE	TOTAL	GENERAL FUND	AUGMENTING REVENUE	TOTAL	GENERAL FUND	AUGMENTING REVENUE
HIGHER EDUCATION									
ADAMS STATE COLLEGE	164,589	157,589	7,000	250,943	242,943	8,000	250,943	242,943	8,000
ARAPAHOE COMM. COLLEGE	192,160	137,382	54,778	338,659	311,091	27,568	277,439	249,871	27,568
COLO SCHOOL OF MINES	1,424,262	901,505	522,757	1,452,872	989,207	463,665	1,355,167	911,502	443,665
COLO STATE UNIV.	2,106,518	2,106,518		2,246,518	2,246,518		2,104,202	2,104,202	
COMM. COLL. OF DENVER	635,177	610,117	25,060	826,648	799,339	27,309	762,496	735,187	27,309
FORT LEWIS COLLEGE	245,364	245,364		301,123	301,123		271,123	271,123	
LAMAR COMM. COLLEGE	53,943	53,943		64,944	64,944		64,944	64,944	
MESA COLLEGE	257,175	257,175		300,573	300,573		263,822	263,822	
METROPOLITAN STATE COLLEGE	468,319	453,314	15,005	593,292	577,177	16,115	494,139	478,024	16,115
OTERO JUNIOR COLLEGE	131,496	131,496		141,288	141,288		139,066	139,066	
PIKES PEAK COMM. COLLEGE	343,321	313,790	29,531	389,356	355,546	33,810	366,865	333,055	33,810
PUEBLO VOCATIONAL COMMUNITY	28,480	28,480		61,778	61,778		63,185	63,185	
TRINIDAD STATE JR. COLLEGE	131,982	131,982		141,683	141,683		139,072	139,072	
UNIV OF COLO. COLO. SPRINGS	250,542	250,481	61	306,622	306,622		235,982	235,982	
UNIV OF COLO. DENVER	310,716	310,716		370,428	370,428		291,445	291,445	
UNIV OF COLO. MED. CTR.	1,917,540	1,769,413	148,127	4,911,092	4,747,289	163,803	2,000,129	1,836,326	163,803
UNIV OF COLORADO BOULDER	4,154,732	2,804,732	1,350,000	4,543,463	3,151,811	1,391,652	4,384,786	3,136,134	1,248,652
UNIV OF NORTHERN COLORADO	723,231	722,231	1,000	791,613	790,613	1,000	775,450	774,450	1,000
UNIV OF SOUTHERN COLORADO	409,521	409,521		1,376,850	1,376,850		641,945	641,945	
WESTERN STATE COLLEGE	250,320	250,320		324,187	324,187		275,269	275,269	
TOTAL HIGHER EDUCATION	14,199,788	12,046,469	2,153,319	19,733,932	17,601,010	2,132,922	15,157,469	13,187,547	1,969,922

STATE OF COLORADO

TOTAL COST BY AGENCY

	1979-80 FTE	1979-80 ACTUAL $	1980-81 FTE	1980-81 ESTIMATE $	1981-82 FTE	1981-82 REQUEST $	1981-82 FTE	1981-82 RECOMMENDED $
AGENCY OPERATED ADP								
COMP. INSURANCE FUND	20.40	907,353	20.10	970,007	25.00	1,137,118	25.00	1,137,118
DEPARTMENT OF AGRICULTURE		25,122		12,078		12,078		12,078
DEPARTMENT OF EDUCATION	9.56	304,102	10.40	393,847	10.90	400,312	10.90	400,312
DEPARTMENT OF HEALTH	31.00	669,615	34.00	764,947	35.00	836,655	35.00	836,655
DEPARTMENT OF HIGHWAYS	37.00	2,082,868	42.00	2,255,901	43.00	2,256,408	43.00	2,256,408
DEPARTMENT OF INSTITUTIONS	35.00	965,766	34.50	1,047,975	41.50	1,243,961	41.50	1,243,961
DEPARTMENT OF LAW	12.50	302,143	16.60	471,947	21.20	480,969	21.20	480,969
DEPARTMENT OF PERSONNEL	1.00	146,108	1.00	181,078	1.00	186,335	1.00	186,335
DEPARTMENT OF REVENUE	224.81	4,133,820	225.20	4,720,354	231.20	5,191,276	231.20	5,191,276
DEPARTMENT OF STATE		255,979	1.00	172,095	1.00	110,391	2.00	165,052
DEPARTMENT OF TREASURY	0.50	40,559	0.50	62,447	0.50	40,684	0.50	40,684
DEPT. OF CORRECTIONS	7.50	369,301	8.50	371,270	9.50	410,071	9.50	410,071
DEPT. OF LOC. AFF. CBI	19.00	1,497,506	20.00	1,723,432	21.00	1,859,561	22.00	1,860,256
DEPT. OF LOC. AFF. CRIMINAL	3.40	21,950	4.40	37,049	5.40	65,083	5.40	65,083
DEPT. OF LOC. AFF. EXECUTIVE	0.40	8,550	2.00	50,103	2.00	51,398	2.00	51,398
DEPT. OF LOC. AFF. LOCAL GOV	1.00	24,614	1.00	27,637	1.00	27,420	1.00	27,420
DEPT. OF LOC. AFF. PLANNING	1.00	20,595	1.00	255,245	2.00	80,280	2.00	80,280
DEPT. OF LOC. AFF. PROPERTY	1.00	44,606	0.80	57,923	2.00	76,747	1.00	58,389
DEPT. OF MILITARY AFFAIRS		1,329		2,316		7,316		7,316
DEPT. OF NAT. RES. ADMIN.	9.00	236,254	9.00	281,709	9.00	285,875	9.00	285,875
DEPT. OF NAT. RES. WATER	5.00	125,411	5.00	137,546	5.00	153,300	5.00	153,300
DEPT. OF PLANNING & BUDGET		30,650		38,760				21,486
DEPT. OF REGULATORY AGENCIES	7.00	260,252	8.00	474,242	9.00	424,003	9.00	424,003
DEPT. OF SOCIAL SERVICES	29.00	3,174,363	31.00	3,164,076	32.00	2,563,169	32.00	2,467,653
DIVISION OF EMPLOYMENT	74.00	4,042,696	72.50	4,168,148	86.00	3,653,271	86.00	3,653,271
DIVISION OF LABOR	5.00	138,832	7.00	245,588	11.00	279,451	11.00	259,747
GEN GOVT COMPUTER CENTER	111.90	5,223,237	127.00	4,293,174	127.00	4,506,034	127.00	4,506,034
GENERAL ASSEMBLY		291,000		306,500		272,400		272,400
JUDICIAL BRANCH	6.60	758,775	12.00	669,549	13.00	764,337	13.00	795,137
LEGISLATIVE COUNCIL	3.00	45,861	3.00	47,916	3.00	54,863	3.00	54,863
LEGISLATIVE DRAFTING OFFICE	9.00	232,840	9.00	284,395	9.00	291,285	9.00	291,285
OFFICE OF STATE AUDITOR		20,504		1,620		7,660		7,660
TOTAL AGENCY OPERATED ADP	664.57	26,402,581	706.50	27,690,874	757.20	27,733,751	758.20	27,653,805
TOTAL HIGHER EDUCATION	357.60	15,068,036	368.00	14,199,788	407.70	19,733,932	383.00	15,157,469
STATE TOTALS	1,022.17	41,470,617	1,074.50	41,890,662	1,164.90	47,467,683	1,141.20	42,851,274

STATE OF COLORADO

TOTAL COST BY AGENCY

	1979-80 FTE	1979-80 ACTUAL $	1980-81 FTE	1980-81 ESTIMATE $	1981-82 FTE	1981-82 REQUEST $	1981-82 FTE	1981-82 RECOMMENDED $
HIGHER EDUCATION								
ADAMS STATE COLLEGE	5.70	139,968	6.50	164,989	6.50	250,943	6.50	250,943
ARAPAHOE COMM. COLLEGE	6.10	130,894	6.20	192,160	8.30	338,659	7.30	277,459
COLO SCHOOL OF MINES	18.60	3,026,499	24.60	1,424,262	27.70	1,452,872	26.40	1,355,167
COLO STATE UNIV.	76.60	2,754,563	60.40	2,106,518	60.40	2,246,518	60.40	2,104,202
COMM. COLL. OF DENVER	20.90	504,035	23.20	635,177	27.40	826,648	26.40	762,496
FORT LEWIS COLLEGE	7.00	222,905	7.00	245,364	8.00	301,123	8.00	271,123
LAMAR COMM. COLLEGE	1.70	38,249	1.70	53,945	2.00	64,944	2.00	64,944
MESA COLLEGE	6.40	261,359	7.00	257,175	7.80	300,573	7.80	283,622
METROPOLITAN STATE COLLEGE	14.20	413,482	15.00	468,319	20.00	593,292	16.00	494,153
OTERO JUNIOR COLLEGE	3.00	105,727	3.50	131,496	3.50	141,258	3.50	139,066
PIKES PEAK COMM. COLLEGE	9.60	280,240	11.50	343,321	12.00	389,356	12.00	366,865
PUEBLO VOCATIONAL COMMUNITY	0.60	25,647	0.60	28,480	1.70	61,778	1.70	63,185
TRINIDAD STATE JR. COLLEGE	4.70	113,094	4.10	131,982	4.10	141,663	4.10	139,072
UNIV OF COLO. COLO. SPRINGS	5.80	293,420	6.00	250,542	7.70	306,622	6.00	235,982
UNIV OF COLO. DENVER	7.50	318,903	7.50	310,716	8.30	370,428	7.70	291,445
UNIV OF COLO. MED. CTR.	43.00	1,693,668	47.00	1,917,540	59.00	4,911,092	47.00	2,000,129
UNIV OF COLORADO BOULDER	82.60	3,545,965	92.80	4,154,732	92.80	4,543,463	92.80	4,364,786
UNIV OF NORTHERN COLORADO	22.00	662,434	22.00	723,231	24.00	791,613	23.00	775,450
UNIV OF SOUTHERN COLORADO	14.40	351,991	14.40	409,521	17.00	1,376,850	16.40	641,945
WESTERN STATE COLLEGE	7.00	184,973	7.00	250,320	9.50	324,187	8.00	275,269
TOTAL HIGHER EDUCATION	357.60	15,068,036	368.00	14,199,788	407.70	19,733,932	383.00	15,157,469

STATE OF COLORADO

TOTAL PERSONAL SERVICES COST

	1979-80 FTE	1979-80 ACTUAL $	1980-81 FTE	1980-81 ESTIMATE $	1981-82 FTE	1981-82 REQUEST $	1981-82 FTE	1981-82 RECOMMENDED $
AGENCY OPERATED ADP								
COMP. INSURANCE FUND	20.40	306,931	20.10	355,638	25.00	436,408	25.00	436,408
DEPARTMENT OF AGRICULTURE		7,540		7,378		7,378		7,378
DEPARTMENT OF EDUCATION	9.56	233,679	10.40	280,846	10.90	293,042	10.90	293,042
DEPARTMENT OF HEALTH	31.00	591,925	34.00	719,814	35.00	763,218	35.00	763,218
DEPARTMENT OF HIGHWAYS	37.00	894,644	42.00	1,072,514	43.00	1,099,172	43.00	1,099,172
DEPARTMENT OF INSTITUTIONS	35.00	735,580	34.50	806,468	41.50	896,839	41.50	896,839
DEPARTMENT OF LAW	12.50	206,855	16.60	307,739	21.20	393,492	21.20	393,492
DEPARTMENT OF PERSONNEL	1.00	29,802	1.00	37,930	1.00	34,710	1.00	34,710
DEPARTMENT OF REVENUE	224.81	3,289,243	225.20	3,487,955	231.20	3,557,991	231.20	3,557,991
DEPARTMENT OF STATE			1.00	25,611	1.00	34,050	2.00	64,955
DEPARTMENT OF TREASURY	0.50	6,021	0.50	12,026	0.50	11,200	0.50	11,200
DEPT. OF CORRECTIONS	7.50	143,608	8.50	185,951	9.50	206,591	9.50	206,591
DEPT. OF LOC. AFF. CBI	19.00	448,888	20.00	486,940	21.00	499,410	22.00	526,095
DEPT. OF LOC. AFF. CRIMINAL	3.40	15,648	4.40	22,279	5.40	48,013	5.40	48,013
DEPT. OF LOC. AFF. EXECUTIVE	0.40	3,853	2.00	44,296	2.00	45,010	2.00	45,010
DEPT. OF LOC. AFF. LOCAL GOV	1.00	22,492	1.00	25,637	1.00	25,420	1.00	25,420
DEPT. OF LOC. AFF. PLANNING	1.00	17,534	1.00	22,875	2.00	29,405	2.00	29,405
DEPT. OF LOC. AFF. PROPERTY	1.00	23,883	0.60	8,669	2.00	28,113	1.00	9,755
DEPT. OF MILITARY AFFAIRS								
DEPT. OF NAT. RES. ADMIN.	9.00	182,106	9.00	211,767	9.00	211,044	9.00	211,044
DEPT. OF NAT. RES. WATER	5.00	31,354	5.00	58,235	5.00	61,300	5.00	61,300
DEPT. OF PLANNING & BUDGET								
DEPT. OF REGULATORY AGENCIES	7.00	162,358	8.00	213,566	9.00	222,371	9.00	222,371
DEPT. OF SOCIAL SERVICES	29.00	671,894	31.00	833,037	32.00	861,476	32.00	863,210
DIVISION OF EMPLOYMENT	74.00	1,402,181	72.50	1,535,103	86.00	1,706,971	86.00	1,706,971
DIVISION OF LABOR	5.00	91,753	7.00	114,757	11.00	242,379	11.00	222,675
GEN GOVT COMPUTER CENTER	111.90	2,296,266	127.00	2,602,827	127.00	2,670,300	127.00	2,670,300
GENERAL ASSEMBLY								
JUDICIAL BRANCH	6.60	157,880	12.00	318,316	13.00	345,763	13.00	345,763
LEGISLATIVE COUNCIL	3.00	38,391	3.00	40,446	3.00	47,393	3.00	47,393
LEGISLATIVE DRAFTING OFFICE	9.00	150,851	9.00	167,139	9.00	203,917	9.00	203,917
OFFICE OF STATE AUDITOR								
TOTAL AGENCY OPERATED ADP	664.57	12,165,160	706.50	14,025,779	757.20	14,962,376	758.20	15,000,519
TOTAL HIGHER EDUCATION	357.60	7,055,417	368.00	8,130,937	407.70	9,014,961	383.00	8,447,973
STATE TOTALS	1,022.17	19,220,577	1,074.50	22,156,716	1,164.90	23,997,337	1,141.20	23,448,492

STATE OF COLORADO

TOTAL PERSONAL SERVICES COST

	1979-80 FTE	1979-80 ACTUAL $	1980-81 FTE	1980-81 ESTIMATE $	1981-82 FTE	1981-82 REQUEST $	1981-82 FTE	1981-82 RECOMMENDED $
HIGHER EDUCATION								
ADAMS STATE COLLEGE	5.70	90,396	6.50	104,961	6.50	111,647	6.50	111,647
ARAPAHOE COMM. COLLEGE	6.10	100,460	6.20	118,692	8.30	170,917	7.30	145,154
COLO SCHOOL OF MINES	18.60	401,397	24.60	598,001	27.70	691,331	26.40	613,433
COLO STATE UNIV.	76.60	1,547,166	60.40	1,348,976	60.40	1,372,802	60.40	1,340,660
COMM. COLL. OF DENVER	20.90	339,240	23.20	441,726	27.40	503,470	26.40	452,348
FORT LEWIS COLLEGE	7.00	124,690	7.00	141,559	8.00	165,969	8.00	165,969
LAMAR COMM. COLLEGE	1.70	24,354	1.70	26,425	2.00	35,746	2.00	35,746
MESA COLLEGE	6.40	119,915	7.00	142,942	7.80	157,072	7.80	157,072
METROPOLITAN STATE COLLEGE	14.20	260,601	15.00	312,295	20.00	420,323	16.00	338,115
OTERO JUNIOR COLLEGE	3.00	64,081	3.50	76,316	3.50	82,051	3.50	79,029
PIKES PEAK COMM. COLLEGE	9.80	184,864	11.50	246,693	12.00	263,549	12.00	254,261
PUEBLO VOCATIONAL COMMUNITY	0.60	7,330	0.60	13,001	1.70	26,345	1.70	26,345
TRINIDAD STATE JR. COLLEGE	4.70	74,335	4.10	74,390	4.10	81,449	4.10	76,038
UNIV OF COLO. COLO. SPRINGS	5.60	95,252	6.00	98,816	7.70	127,110	6.00	100,053
UNIV OF COLO. DENVER	7.50	103,471	7.50	116,577	8.30	136,417	7.70	126,704
UNIV OF COLO. MED. CTR.	43.00	942,506	47.00	1,043,404	59.00	1,277,439	47.00	1,043,404
UNIV OF COLORADO BOULDER	82.60	1,775,917	92.80	2,317,017	92.80	2,328,110	92.80	2,325,016
UNIV OF NORTHERN COLORADO	22.00	419,315	22.00	475,938	24.00	513,954	23.00	497,791
UNIV OF SOUTHERN COLORADO	14.40	254,001	14.40	289,307	17.00	348,662	16.40	342,207
WESTERN STATE COLLEGE	7.00	126,126	7.00	143,901	9.50	198,598	8.00	165,601
TOTAL HIGHER EDUCATION	357.60	7,055,417	368.00	8,130,937	407.70	9,014,961	383.00	8,447,673

STATE OF COLORADO

TOTAL EQUIPMENT COSTS

	ACTUAL $	ESTIMATE $	REQUEST $	RECOMMENDED $
AGENCY OPERATED ADP				
COMP. INSURANCE FUND	94,458	24,180	16,200	16,200
DEPARTMENT OF AGRICULTURE	16,243	2,100		
DEPARTMENT OF EDUCATION	29,178	81,796	73,050	73,050
DEPARTMENT OF HEALTH	62,107	28,700	56,594	56,594
DEPARTMENT OF HIGHWAYS	238,744	210,187	180,336	180,336
DEPARTMENT OF INSTITUTIONS	193,006	165,806	248,279	248,279
DEPARTMENT OF LAW	60,766	123,858	31,017	31,017
DEPARTMENT OF PERSONNEL	15,480	14,348	15,673	15,673
DEPARTMENT OF REVENUE	572,866	939,718	1,271,754	1,271,754
DEPARTMENT OF STATE	22,944	22,944	25,116	25,116
DEPARTMENT OF TREASURY	492	24,671	9,212	9,212
DEPT. OF CORRECTIONS	27,175	29,356	36,477	36,477
DEPT. OF LOC. AFF. CBI	1,026,649	1,210,821	1,321,710	1,321,710
DEPT. OF LOC. AFF. CRIMINAL		1,320	2,700	2,700
DEPT. OF LOC. AFF. EXECUTIVE	4,270	5,380	5,918	5,918
DEPT. OF LOC. AFF. LOCAL GOV				
DEPT. OF LOC. AFF. PLANNING		222,870	36,175	36,175
DEPT. OF LOC. AFF. PROPERTY	421	6,120	6,732	6,732
DEPT. OF MILITARY AFFAIRS	1,329	2,316	7,316	7,316
DEPT. OF NAT. RES. ADMIN.	29,132	35,576	38,066	38,066
DEPT. OF NAT. RES. WATER	39,898	21,600	25,980	25,980
DEPT. OF PLANNING & BUDGET				
DEPT. OF REGULATORY AGENCIES	14,321	34,365	39,418	39,418
DEPT. OF SOCIAL SERVICES	107,014	166,174	436,394	362,144
DIVISION OF EMPLOYMENT	1,506,177	1,888,233	1,174,663	1,174,663
DIVISION OF LABOR	7,733	18,399	19,231	19,231
GEN GOVT COMPUTER CENTER	2,310,602	1,079,781	1,154,644	1,154,644
GENERAL ASSEMBLY	62,400	62,400	62,400	62,400
JUDICIAL BRANCH	282,683	236,721	268,995	268,995
LEGISLATIVE COUNCIL	7,470	7,470	7,470	7,470
LEGISLATIVE DRAFTING OFFICE	43,542	58,434	46,334	46,334
OFFICE OF STATE AUDITOR	19,800	920	6,860	6,860
TOTAL AGENCY OPERATED ADP	7,196,900	6,726,584	6,624,714	6,550,464
TOTAL HIGHER EDUCATION	5,882,296	4,458,231	8,346,897	5,016,363
STATE TOTAL	13,079,196	11,184,815	14,971,611	11,566,827

STATE OF COLORADO

TOTAL EQUIPMENT COSTS

	ACTUAL $	ESTIMATE $	REQUEST $	RECOMMENDED $
HIGHER EDUCATION				
ADAMS STATE COLLEGE	40,191	44,984	110,382	110,382
ARAPAHOE COMM. COLLEGE	22,732	69,328	158,357	122,050
COLO SCHOOL OF MINES	2,407,195	705,061	628,601	608,794
COLO STATE UNIV.	756,898	534,815	614,260	534,815
COMM. COLL. OF DENVER	46,675	142,987	247,037	204,285
FORT LEWIS COLLEGE	90,430	89,400	118,067	88,067
LAMAR COMM. COLLEGE	4,034	12,977	13,885	13,885
MESA COLLEGE	57,150	85,000	110,000	86,750
METROPOLITAN STATE COLLEGE	106,892	114,741	125,932	117,694
OTERO JUNIOR COLLEGE	34,573	47,224	48,410	48,410
PIKES PEAK COMM. COLLEGE	82,843	86,114	108,044	97,541
PUEBLO VOCATIONAL COMMUNITY	12,554	12,431	23,938	31,155
TRINIDAD STATE JR. COLLEGE	32,725	46,691	48,428	48,428
UNIV OF COLO. COLO. SPRINGS	70,668	95,570	113,055	108,272
UNIV OF COLO. DENVER	76,441	118,626	141,948	127,868
UNIV OF COLO. MED. CTR.	440,465	533,938	2,603,680	592,713
UNIV OF COLORADO BOULDER	1,204,963	1,341,375	1,656,793	1,519,878
UNIV OF NORTHERN COLORADO	193,681	206,424	214,905	214,905
UNIV OF SOUTHERN COLORADO	59,384	74,626	956,718	240,038
WESTERN STATE COLLEGE	51,762	95,919	103,857	98,433
TOTAL HIGHER EDUCATION	5,882,296	4,458,231	8,346,897	5,016,363

STATE OF COLORADO

TOTAL OPERATING COSTS

	ACTUAL $	ESTIMATE $	REQUEST $	RECOMMENDED $
AGENCY OPERATED ADP				
COMP. INSURANCE FUND	505,964	590,189	684,510	684,510
DEPARTMENT OF AGRICULTURE	1,339	2,600	4,700	4,700
DEPARTMENT OF EDUCATION	41,245	31,205	34,220	34,220
DEPARTMENT OF HEALTH	15,583	16,433	16,843	16,843
DEPARTMENT OF HIGHWAYS	549,500	973,200	978,900	978,900
DEPARTMENT OF INSTITUTIONS	37,180	75,701	98,863	98,863
DEPARTMENT OF LAW	32,522	40,350	56,460	56,460
DEPARTMENT OF PERSONNEL	100,826	126,800	137,952	137,952
DEPARTMENT OF REVENUE	271,711	292,681	361,531	361,531
DEPARTMENT OF STATE	233,035	123,540	51,225	15,000
DEPARTMENT OF TREASURY	34,046	25,750	20,272	20,272
DEPT. OF CORRECTIONS	198,518	155,963	167,003	167,003
DEPT. OF LOC. AFF. CBI	21,969	25,671	38,461	38,461
DEPT. OF LOC. AFF. CRIMINAL	6,302	13,450	14,370	14,370
DEPT. OF LOC. AFF. EXECUTIVE	427	427	470	470
DEPT. OF LOC. AFF. LOCAL GOV	2,122	2,000	2,000	2,000
DEPT. OF LOC. AFF. PLANNING	3,061	9,500	14,700	14,700
DEPT. OF LOC. AFF. PROPERTY	20,302	43,114	41,902	41,902
DEPT. OF MILITARY AFFAIRS				
DEPT. OF NAT. RES. ADMIN.	25,016	34,366	36,765	36,765
DEPT. OF NAT. RES. WATER	54,159	57,711	66,020	66,020
DEPT. OF PLANNING & BUDGET	30,650	38,760		21,486
DEPT. OF REGULATORY AGENCIES	83,573	226,291	162,214	162,214
DEPT. OF SOCIAL SERVICES	2,395,455	2,164,865	1,265,299	1,265,299
DIVISION OF EMPLOYMENT	734,338	744,812	771,637	771,637
DIVISION OF LABOR	39,346	112,432	17,841	17,841
GEN GOVT COMPUTER CENTER	616,369	610,566	681,090	681,090
GENERAL ASSEMBLY	228,600	244,100	210,000	210,000
JUDICIAL BRANCH	318,212	114,512	149,579	180,379
LEGISLATIVE COUNCIL				
LEGISLATIVE DRAFTING OFFICE	38,447	38,822	41,034	41,034
OFFICE OF STATE AUDITOR	704	700	800	800
TOTAL AGENCY OPERATED ADP	7,040,521	6,938,511	6,126,661	6,142,722
TOTAL HIGHER EDUCATION	2,130,323	1,610,620	2,372,074	1,693,233
STATE TOTAL	9,170,844	8,549,131	8,498,735	7,835,955

STATE OF COLORADO

TOTAL OPERATING COSTS

	ACTUAL $	ESTIMATE $	REQUEST $	RECOMMENDED $
HIGHER EDUCATION				
ADAMS STATE COLLEGE	9,381	15,044	28,914	23,914
ARAPAHOE COMM. COLLEGE	7,702	4,140	9,385	9,235
COLO SCHOOL OF MINES	217,907	121,200	132,940	132,940
COLO STATE UNIV.	450,499	222,727	259,456	222,727
COMM. COLL. OF DENVER	68,120	53,464	76,141	65,863
FORT LEWIS COLLEGE	7,785	14,405	17,087	17,087
LAMAR COMM. COLLEGE	9,861	14,541	15,313	15,313
MESA COLLEGE	44,294	29,233	32,901	20,000
METROPOLITAN STATE COLLEGE	45,989	41,283	47,057	38,330
OTERO JUNIOR COLLEGE	7,073	7,956	10,627	10,827
PIKES PEAK COMM. COLLEGE	12,533	10,514	17,763	13,043
PUEBLO VOCATIONAL COMMUNITY	5,763	3,048	11,495	5,685
TRINIDAD STATE JR. COLLEGE	6,034	10,901	11,806	11,806
UNIV OF COLO. COLO. SPRINGS	127,500	56,136	66,457	27,677
UNIV OF COLO. DENVER	138,991	75,513	90,063	36,793
UNIV OF COLO. MED. CTR.	310,717	343,198	829,973	364,012
UNIV OF COLORADO BOULDER	565,065	496,340	558,563	539,292
UNIV OF NORTHERN COLORADO	49,438	40,869	62,754	62,754
UNIV OF SOUTHERN COLORADO	38,606	45,588	71,470	59,700
WESTERN STATE COLLEGE	7,065	10,500	21,732	11,235
TOTAL HIGHER EDUCATION	2,130,323	1,610,620	2,372,074	1,693,233

ADP BUDGET ANALYSIS

AGENCY GENERAL ASSEMBLY

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES								
OPERATING EXPENSE		228,600		244,100		210,000		210,000*
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		62,400		62,400		62,400		62,400
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL		62,400		62,400		62,400		62,400
TOTAL		291,000		306,500		272,400		272,400
GENERAL FUND		291,000		306,500		272,400		272,400
CASH								
FEDERAL								

COMMENTS:

Outside Contract, per Joint Rule 31, date December, 1978, for the CLEAR system. Contract is with Public System Associates.

Fewer monies are requested than in previous years due to software development being completed which necessitates the commencement of a maintenance mode. Equipment costs are fixed however.

* Includes undifferentiated cost for 5 query terminals, 7 direct entry terminals, communication lines, and personnel. Locations of terminals are:

1 in JBC Offices
1 in Legislative Council
1 in Senate Offices
1 in House Offices
1 in Minority Leadership Offices
7 direct entry terminals in various locations.

From FY 1977-78 thru FY 1981-82 over $1,330,000 will have been expended on this system. This is a great deal of money for a system which is purported to have little utility. House staff and JBC staff, last year, expressed dissatisfaction in its usefulness. We would like to recommend a Cost/Benefit - Feasibility study be performed.

ADP BUDGET ANALYSIS

AGENCY LEGISLATIVE COUNCIL

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	3.00	38,391	3.00	40,446	3.00	47,393	3.00	47,393
OPERATING EXPENSE								
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		7,470		7,470		7,470		7,470
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL		7,470		7,470		7,470		7,470
TOTAL	3.00	45,861	3.00	47,916	3.00	54,863	3.00	54,863
GENERAL FUND	3.00	45,861	3.00	47,916	3.00	54,863	3.00	54,863
CASH								
FEDERAL								

COMMENTS:

Personnel and equipment remain at the same level budgeted in FY 1980-81. Increases are due to the normal salary escalation.

ADP BUDGET ANALYSIS

AGENCY LEGISLATIVE DRAFTING OFFICE

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	9.00	150,851	9.00	187,139	9.00	203,917	9.00	203,917
OPERATING EXPENSE		38,447		38,822		41,034		41,034
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		26,747		32,334		32,334		32,334
EQUIPMENT C/O		16,795		26,100		14,000		14,000
EQUIPMENT SUB-TOTAL		43,542		58,434		46,334		46,334
TOTAL	9.00	232,840	9.00	284,395	9.00	291,285	9.00	291,285
GENERAL FUND	9.00	232,840	9.00	284,395	9.00	291,285	9.00	291,285
CASH								
FEDERAL								

COMMENTS:

Increase is due, for the most part, to realignment of staff and normal escalation of personal services cost.

No major hardware or software acquisitions are anticipated.

Operating expense includes $1,812 for State Agency Service Contract.

ADP BUDGET ANALYSIS

AGENCY OFFICE OF STATE AUDITOR

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES								
OPERATING EXPENSE		704		700		800		800
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		160		920		6,860		6,860
EQUIPMENT C/O		19,640						
EQUIPMENT SUB-TOTAL		19,800		920		6,860		6,860
TOTAL		20,504		1,620		7,660		7,660
GENERAL FUND		20,504		1,620		7,660		7,660
CASH								
FEDERAL								

COMMENTS:

Recommendation includes ongoing expenses and funds for acquisition, installation and operation of equipment and communication facilities to enable terminal access to both ALTER and CICS. Funds which may have been appropriated for this in FY 1980-81 will be returned to General Fund if not used.

ADP BUDGET ANALYSIS AGENCY JUDICIAL BRANCH

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	6.60	157,880	12.00	318,316	13.00	345,763	13.00	345,763
OPERATING EXPENSE		280,701		63,834		91,166		121,966
OPERATING EXPENSE OTHER		37,511		50,678		58,413		58,413
EQUIPMENT -								
EQUIPMENT RENTAL		282,683		236,721		268,995		268,995
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL		282,683		236,721		268,995		268,995
TOTAL	6.60	758,775	12.00	669,549	13.00	764,337	13.00	795,137
GENERAL FUND	6.60	598,511	12.00	564,549	13.00	764,337	13.00	795,137
CASH		160,264		105,000				
FEDERAL								

COMMENTS:

Increase in Personal Service cost is due to normal salary escalation and the addition of 1.0 FTE approved as a Data Processing Training Officer.

The bulk of increase in Operating Expense is to support two functions:

a. Acquisition of forms for use on remote printers located in the courts.

b. Contract services for $30,800 with GGCC to provide Data Entry.

Equipment funding increase is to support acquisition of terminal equipment to be installed in the offices of the Clerk of the Court of Appeals and Clerk of the Supreme Court.

ADP BUDGET ANALYSIS AGENCY GEN GOVT COMPUTER CENTER

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	111.90	2,296,266	127.00	2,602,827	127.00	2,670,300	127.00	2,670,300
OPERATING EXPENSE		616,369		610,566		681,090		681,090
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		1,270,485		1,079,781		1,154,644		1,154,644
EQUIPMENT C/O		1,040,117						
EQUIPMENT SUB-TOTAL		2,310,602		1,079,781		1,154,644		1,154,644
TOTAL	111.90	5,223,237	127.00	4,293,174	127.00	4,506,034	127.00	4,506,034
GENERAL FUND		4,626,253	116.70	3,559,761	116.70	3,746,807	116.70	3,746,807
CASH		596,984	10.30	733,413	10.30	759,227	10.30	759,227
FEDERAL								

COMMENTS:

I. PERSONAL SERVICES:

a. The Division of ADP in the 1980 ADP Master Plan suggested and actively supported the decentralization of system development in order to provide local control and responsibility over the accuracy and timeliness of this function to better meet the requirements of the user. The Division of ADP recommends and requests legislative support to continue in this direction by recommending that 4.0 systems development FTE be transferred from the General Government Computer Center to the Division of Labor, Department of State, and Department of Local Affairs. The request is as follows:

DEPARTMENT	FTE	DOLLARS
Department of State	1.0	$ 30,886
Department of Local Affairs (Division of Property Tax)	1.0	26,685
Division of Labor	2.0	49,735
Total GGCC reduction	4.0	$107,306

If supported, the above 4.0 FTE and $107,306 dollars should be dropped from GGCC's FY 1981-82 appropriation and funds should be appropriated to the above mentioned Departments in FY 1981-82. Analyst should review the ADP Budget Analysis for each receiving Department to see justification and total impact of each individual position cost, potted funds, etc. The above dollars represent base annual salary and PERA. In most cases, the transfer of the position will also involve the relocation of personnel occupying the position.

ADP BUDGET ANALYSIS

AGENCY DEPARTMENT OF AGRICULTURE

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES		7,540		7,378		7,378		7,378
OPERATING EXPENSE		1,339		2,600		2,600		2,600
OPERATING EXPENSE OTHER						2,100		2,100
EQUIPMENT -								
EQUIPMENT RENTAL		1,404		2,100				
EQUIPMENT C/O		14,839						
EQUIPMENT SUB-TOTAL		16,243		2,100				
TOTAL		25,122		12,078		12,078		12,078
GENERAL FUND		25,122		12,078		12,078		12,078
CASH								
FEDERAL								

ADP BUDGET ANALYSIS AGENCY DEPT. OF CORRECTIONS

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	7.50	143,608	8.50	185,951	9.50	206,591	9.50	206,591
OPERATING EXPENSE		198,518		155,963		167,003		167,003
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		26,002		29,356		36,477		36,477
EQUIPMENT C/O		1,173						
EQUIPMENT SUB-TOTAL		27,175		29,356		36,477		36,477
TOTAL	7.50	369,301	8.50	371,270	9.50	410,071	9.50	410,071
GENERAL FUND	7.50	369,301	8.50	371,270	9.50	410,071	9.50	410,071
CASH								
FEDERAL								

COMMENTS:

PERSONAL SERVICES:
One additional programmer has been requested by the Department of Corrections. Currently there are two systems analyst/programmers and one programming position to perform all computer program maintenance, and improvement. This small number of programmers is considerably lower in number in comparison to other State agencies with a similar level of requirements and complexities. The DADP supports this request for one additional programmer (1 FTE, programmer $19,900).

OPERATING EXPENSE:
Operating expense increases are associated with lease time for computer service in the amount of $6,787. Lease services are projected at $123,787 for the AJCC center and $30,635 for the Institutions Center at Pueblo. In addition, $4,253 additional has been requested for computer consumables and card/paper supplies.

EQUIPMENT RENTAL AND MAINTENANCE:
The major increase in this category is associated with equipment maintenance ($4,674) increase. These increases reflect inflationary increases projected by vendors of operational equipment.

The other increase is a smaller amount of $2,447 for increased cost associated with data circuit and other network equipment cost necessary to support remote terminals into the AJCC center.

SOURCE OF FUNDS:
All funds are requested from the State General Funds.

ADP BUDGET ANALYSIS

AGENCY DEPARTMENT OF EDUCATION

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	9.56	233,679	10.40	280,846	10.90	293,042	10.90	293,042
OPERATING EXPENSE		41,245		31,205		34,220		34,220
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		20,085		28,680		42,200		42,200
EQUIPMENT C/O		9,093		53,116		30,850		30,850
EQUIPMENT SUB-TOTAL		29,178		81,796		73,050		73,050
TOTAL	9.56	304,102	10.40	393,847	10.90	400,312	10.90	400,312
GENERAL FUND	8.50	261,598	9.90	327,199	9.90	338,346	9.90	338,346
CASH				22,739		1,273		1,273
FEDERAL	1.06	42,504	0.50	43,909	1.00	60,693	1.00	60,693

COMMENTS:

The requested increase in operating expense for FY 81-82 represents the increased costs for the same number of hours (2726) of keypunching as in FY 80-81. This request shifts $10,000 to contract keypunching that GGCC has approved because it is not staffed to accommodate this large seasonal volume.

ADP BUDGET ANALYSIS AGENCY DEPARTMENT OF HEALTH

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	31.00	591,925	34.00	719,814	35.00	763,218	35.00	763,218
OPERATING EXPENSE		15,583		16,433		16,843		16,843
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		16,387		17,700		33,174		33,174
EQUIPMENT C/O		45,720		11,000		23,420		23,420
EQUIPMENT SUB-TOTAL		62,107		28,700		56,594		56,594
TOTAL	31.00	669,615	34.00	764,947	35.00	836,655	35.00	836,655
GENERAL FUND	22.00	481,829	22.00	555,564	23.00	600,229	23.00	600,229
CASH								
FEDERAL	9.00	187,786	12.00	209,383	12.00	236,426	12.00	236,426

COMMENTS:

The funds requested are a continuation of the current level of support for the data processing program with the exceptions of the following increases:

I. PERSONAL SERVICES:
   a. The increase of 1.0 in the request year over the Division's FY 1981-82 on-going expenditure is for the purpose of establishing a Systems Analyst position ($20,896 General Fund) to support the Air Pollution Division in their endeavor to improve informational processing and to expand the system based on the currently contracted study of air pollution informational requirements and needs.

II. CAPITAL OUTLAY:
   a. The increase of $6,000 (Federal Funds) in the request year over the Division's FY 1981-82 on-going expenditure is to upgrade the magnetic disk on the minicomputer for Radiation Health.

ADP BUDGET ANALYSIS — AGENCY DEPARTMENT OF HIGHWAYS

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	37.00	894,644	42.00	1,072,514	43.00	1,099,172	43.00	1,099,172
OPERATING EXPENSE		949,500		973,200		978,900		978,900
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		46,364		67,172		77,336		77,336
EQUIPMENT C/O		192,380		143,015		103,000		103,000
EQUIPMENT SUB-TOTAL		238,744		210,187		180,336		180,336
TOTAL	37.00	2,082,888	42.00	2,255,901	43.00	2,258,408	43.00	2,258,408
GENERAL FUND								
CASH	22.00	1,768,443	27.00	1,881,343	28.00	1,865,850	28.00	1,865,850
FEDERAL	15.00	314,445	15.00	374,558	15.00	392,558	15.00	392,558

COMMENTS:

PERSONAL SERVICES:
The request is for a continuing staff of 43.0 FTE. Vacancy savings of 1.0 FTE are included in the 1980-81 figures. The request does not include $131,383 for 6.0 FTE with data processing titles in divisions other than the Management Systems Division.

OPERATING EXPENSE:
The request include $80,000 for computer services to GGCC, and $800,000 for computer services at C.U. Boulder at a continuing level of support.

EQUIPMENT:
The request reflects the payoff of the purchase option on leased Hewlett Packard equipment in December, 1980, which lowers the total level of expenditures. It also includes an upgrade to the Harris RJE terminal to replace the UT200, and adds data entry CRT capability to eliminate most card punching. The total impact will increase capacity and improve data entry operations by eliminating cards and old high-maintenance equipment.

ADP BUDGET ANALYSIS AGENCY DEPARTMENT OF INSTITUTIONS

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	35.00	735,580	34.50	806,468	41.50	896,839	41.50	896,839
OPERATING EXPENSE		37,180		75,701		98,863		98,863
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		101,731		60,864		80,337		80,337
EQUIPMENT C/O		91,275		104,942		167,942		167,942
EQUIPMENT SUB-TOTAL		193,006		165,806		248,279		248,279
TOTAL	35.00	965,766	34.50	1,047,975	41.50	1,243,981	41.50	1,243,981
GENERAL FUND	32.40	913,342	32.40	1,003,758	39.40	1,199,764	39.40	1,199,764
CASH	2.60	52,424	2.10	44,217	2.10	44,217	2.10	44,217
FEDERAL								

COMMENTS:

PERSONAL SERVICES:
The increase in Personal Services are as follows:

Systems Analyst	1.0	22,656
Program Management Information Specialist	1.0	22,656
Computer Programmer	1.0	14,594
RJE Operator	2.0	23,698
Data Entry Operator	1.0	8,450
Typist	1.0	5,436
PERA		11,997
Overtime/Shift Differential		850
	7.0	110,337

Note: The 2 RJE operators and the Data Entry Operator positions are currently funded by another Division within the Department. It is suggested that these positions be permanently assigned to ADP as they have been working in this capacity for the last year or so.

OPERATING EXPENSES:
The increase in operating expense is attributable to the replacement of the E.A.M. equipment at Fort Logan and additional systems support.

EQUIPMENT:
The additional Capital Outlay expenditures are requested as follows:

	Capital Outlay	Maintenance
Terminals (6)	14,472	5,400
8450 Disc	13,332	2,712
U22 Tapes and Controller	11,902	2,629
Fort Logan Mini Computer	17,477	2,500
Data 100	5,817	500
TOTAL	$63,000	$13,741

ADP BUDGET ANALYSIS AGENCY DIVISION OF EMPLOYMENT

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	74.00	1,402,181	72.50	1,535,103	86.00	1,706,971	86.00	1,706,971
OPERATING EXPENSE		734,338		744,812		771,637		771,637
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		862,536		1,009,889		791,332		791,332
EQUIPMENT C/O		1,043,641		878,344		383,331		383,331
EQUIPMENT SUB-TOTAL		1,906,177		1,888,233		1,174,663		1,174,663
TOTAL	74.00	4,042,696	72.50	4,168,148	86.00	3,653,271	86.00	3,653,271
GENERAL FUND								
CASH	1.00	83,676	3.00	436,617	6.00	522,794	6.00	522,794
FEDERAL	73.00	3,959,020	69.50	3,731,531	80.00	3,130,477	80.00	3,130,477

COMMENTS:

The 1981-82 ongoing and request totals, reflect a decrease of $389,424 over the 1979-80 actual, and $514,877 over the 1980-81 estimate figures. Conversely the number of FTE's for the ongoing and request totals, reflect an increase of 12 FTE's over the 1979-80 actual 13.5 FTE's over the 1980-81 estimate figures.

Obviously, the overall decrease in cost is supportive and thus recommended by the Division of ADP. However, the increase of 12 FTE's from the 1979-80 actual to the 1981-82 ongoing and request figures presents a dilemma. On the one hand, the Division of ADP is aware that the Colorado Division of Employment and Training (CDET) is in the process of implementing several on line systems/applications for Employment Service (ES) and Unemployment Insurance (UI) activities, and bringing all Data Entry functions in house and reduce contract costs of ADP with a complete ADP/Computing Plan since 1976, as required by CRS, 1973, 24-30-603, and as outlined in the 1980, State ADP Master Plan.

Thus, it is recommended that the approved increases in FTE's be contingent on the CDET providing the Division of ADP with:

- o A complete ADP/Computing Plan including:
  - Current and future utilization of existing ADP staff 74.0 FTE's,
  - Cost justification/feasibility for the requested 12 new FTE's.,
  - and other resources as applicable.

* If the above contingencies cannot be met, the recommended FTE's/funds should be:

* FTE 74.0

* Personal Services	$1,542,399
Operating Expense	771,637
Equipment Rental	791,332
Equipment C/O	383,331
TOTAL	$3,488,699

ADP BUDGET ANALYSIS AGENCY DIVISION OF LABOR

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	5.00	91,753	7.00	114,757	11.00	242,379	11.00	222,675
OPERATING EXPENSE		39,346		112,432		17,841		17,841
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		5,247		18,399		19,231		19,231
EQUIPMENT C/O		2,486						
EQUIPMENT SUB-TOTAL		7,733		18,399		19,231		19,231
TOTAL	5.00	138,832	7.00	245,588	11.00	279,451	11.00	259,747
GENERAL FUND	2.50	74,314	3.70	157,776	7.40	188,451	7.40	168,747
CASH				9,300	0.40	11,000	0.40	11,000
FEDERAL	2.50	64,518	3.30	78,512	3.20	80,000	3.20	80,000

COMMENTS:

The recommended total reflects a one percent decrease over the 1980-81 estimate, and a seven percent increase over the 1979-80 appropriation of $242,754. The significant difference between the recommended and the on going, and the request totals, is due mainly to the fact that 2.0 FTE Computer Programmer positions are being transferred over to the Division of Labor, from the General Government Computer Center (GGCC), and the funding for 2.0 FTE Analyst/Programmer positions approved with 1979-80 appropriation will be filled at the Division of Labor, rather than at GGCC. See the GGCC budget for the resultant reduction of 2.0 FTE's.

The GGCC has already transferred over a Computer Programmer C, and a vacant Computer Programmer position to the Division of Labor. Moreover, the Division of Labor is in the process of hiring a Systems Analyst and a Computer Programmer. This will provide the Division of Labor with the ADP/Computing staff required to fully maintain their existing system applications and to develop and maintain the Labor Management Information System as planned, approved and funded.

ADP BUDGET ANALYSIS — AGENCY COMP. INSURANCE FUND

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	20.40	306,931	20.10	355,638	25.00	436,408	25.00	436,408
OPERATING EXPENSE		505,964		590,189		684,510		684,510
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		14,992		24,180		16,200		16,200
EQUIPMENT C/O		79,466						
EQUIPMENT SUB-TOTAL		94,458		24,180		16,200		16,200
TOTAL	20.40	907,353	20.10	970,007	25.00	1,137,118	25.00	1,137,118
GENERAL FUND								
CASH	20.40	907,353	20.10	970,007	25.00	1,137,118	25.00	1,137,118
FEDERAL								

COMMENTS:

The 1981-82 budget request total, reflects increases of $229,765 over the 1979-80 actual, $167,111 over the 1980-81 estimate, and $75,791 over the 1981-82 ongoing figures.

The Division of ADP is cognizant of the State Compensation Insurance Fund's (SCIF) desire to implement several on line applications, which a Terminal Implementation Plan (TIP) set of documents addresses itself to, and includes:

- o Six applications to be programmed
- o An estimate of target dates for application completions,
- o A comparison of computer equipment cost alternatives, and
- o A Terminal/Application implementation schedule.

However, the Division of ADP has not received a complete ADP/Computing plan from SCIF since 1974, as required by CRS, 1973. 24-30-603, and as outlined in the 1980, State ADP Master Plan.

Thus, it is recommended that the approved funding be contingent on the SCIF providing the Division of ADP with:

- o A complete ADP/Computing Plan including
  - Current and future utilization of existing ADP staff (20.4 FTE's)
  - Cost justification/feasibility for the requested 4.6 new FTE's.
  - and other resources.

If the above contingencies cannot be met, the recommended funds should be:

FTE 20.4

Personal Services	$ 367,217
Operating Expense	625,204[1]
Equipment Rental	22,800[2]
TOTAL	$1,015,221

1. The difference between the ongoing request and this figure is the Division of Employment projection on anticipated ADP/Computing costs and SCIF's projections, and

2. The shifting of $6,600 dollars from Voice Telephone costs under operating expense to public utility line costs under Equipment, for Voice Terminal communications cost.

ADP BUDGET ANALYSIS AGENCY DEPARTMENT OF LAW

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	12.50	208,655	16.60	307,739	21.20	393,492	21.20	393,492
OPERATING EXPENSE		32,522		40,350		56,460		56,460
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		26,213		23,858		31,017		31,017
EQUIPMENT C/O		34,553		100,000				
EQUIPMENT SUB-TOTAL		60,766		123,858		31,017		31,017
TOTAL	12.50	302,143	16.60	471,947	21.20	480,969	21.20	480,969
GENERAL FUND	12.50	302,143	16.60	471,947	21.20	480,969	21.20	480,969
CASH								
FEDERAL								

COMMENTS:

The Division of ADP recognizes the Department of Law's need for text editing capability. Currently this is being supplied through the ALTER system operating on the GGCC computer, however the Department of Law would like to supplement this with an in-house Micro ALTER system. The Micro ALTER would be used as word processing backup to the GGCC. Effectively this would establish a standalone computer system with batch communication capability to the GGCC.

Requested funds reflect the increased expenditures needed to maintain equipment and software for this additional capability, to employ 6.25 FTE over the FY 1980-81 recommendation, and to subscribe to the WESTLAW case law data service. Of this, 1 FTE is computer programmer and 5.25 are word processing operators. The intent of the Department of Law is to offload 100% of the typing requirements from departmental secretaries and consume that load by the word processing section.

ADP BUDGET ANALYSIS — AGENCY DEPT. OF LOC. AFF. CBI

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	19.00	448,888	20.00	486,940	21.00	499,410	22.00	526,095
OPERATING EXPENSE		21,969		25,671		38,461		38,461
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		1,026,649		1,210,821		1,321,710		1,321,710
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL		1,026,649		1,210,821		1,321,710		1,321,710
TOTAL	19.00	1,497,506	20.00	1,723,432	21.00	1,859,581	22.00	1,886,266
GENERAL FUND	13.00	1,006,250	14.00	1,122,536	15.00	1,233,257	16.00	1,259,942
CASH	6.00	491,256	6.00	600,896	6.00	626,324	6.00	626,324
FEDERAL								

COMMENTS:

PERSONAL SERVICES:
Personal Services consists of the following continuing positions: 14 FTE for CBI, 4.0 FTE for Corrections, 2.0 FTE for Highways, totalling 20 FTE. One new position (1 FTE or $14,137) is requested for clerical/secretarial services. In addition, the Division of ADP is recommending the transfer of one current position from the General Government Computer Center to the Administration of Justice Computer Center. This position will service Division of Property Tax computer programs at both GGCC and AJCC. This transfer has been coordinated between GGCC and ACJJ and agreed upon (1 FTE or $26,685) that a computer programmer position will be transferred as of July 1, 1980. Reference GGCC budget recommendations in this volume for corresponding decrease related to this transfer.

OPERATING EXPENSE:
Two items increase operating expense. Magnetic tape and racks are requested this year for the amount of $8,400 and an air conditioning maintenance contract is needed to maintain air conditioners for the AJCC computer room for the amount of $4000. Public buildings have been unable to provide funds for the previous years maintenance expenditure.

EQUIPMENT RENTAL AND MAINTENANCE:
The largest increase in this category is cost attributed to the higher computer and terminal maintenance cost. This increase is estimated at $36,177.

An additional $19,391 is requested to pay for a full years cost for an additional 500,000 words of memory. This memory is needed in order to maintain the performance of the computer as more terminals and additional workloads are required of the AJCC center.

Additional dollars of $28,093 is requested to pay for a full years cost additional magnetic disk. This disk is being used for Local Affairs divisional activities as well as expanded growth requirements for CCIC applications. A total of 397,824,000 words of disk storage space is involved.

The expanded communication network for a full years period will increase expenditures an additional $18,835. This expenditure covers cost for both data circuits and modems. In addition, an increase of $8,393 is requested for payment of terminals.

SOURCE OF FUNDS:
Source of funds from other than General Fund for FY 81-82 are to be obtained from the following sources:

Corrections	$123,787.
Highway Safety Funds (STEP)	$128,537.
Highway Users Tax (CSP)	$374,000.

ADP BUDGET ANALYSIS

AGENCY DEPT. OF LOC. AFF. CRIMINAL JUSTICE

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	3.40	15,648	4.40	22,279	5.40	48,013	5.40	48,013
OPERATING EXPENSE		6,302		13,450		14,370		14,370
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL				1,320		2,700		2,700
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL				1,320		2,700		2,700
TOTAL	3.40	21,950	4.40	37,049	5.40	65,083	5.40	65,083
GENERAL FUND		2,195		18,524				
CASH								
FEDERAL	3.40	19,755	4.40	18,525	5.40	65,083	5.40	65,083

COMMENTS:

GENERAL:
Data processing fund requirements for the Criminal Justice Division are not identified in the Department of Local Affairs budget request. The above distribution was provided by CCJ. All fund requirements will be provided through Federal Grant.

This Grant will be used to merge data base between CCIC, Corrections and Judicial in order to complete the offender tracking system thoughout the Colorado Criminal Justice System. In addition, $16,000 is planned to lease computer services from Michigan University and Wayne State University. These systems provide specialized software to access the National Criminal records system Archives, plus the ability to add Colorado Criminal Justice Data Base and run various statistical comparison analysis.

ADP BUDGET ANALYSIS

AGENCY DEPT. OF LOC. AFF. EXECUTIVE DIRECTOR

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	0.40	3,853	2.00	44,296	2.00	45,010	2.00	45,010
OPERATING EXPENSE		427		427		470		470
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		4,270		5,380		5,918		5,918
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL		4,270		5,380		5,918		5,918
TOTAL	0.40	8,550	2.00	50,103	2.00	51,398	2.00	51,398
GENERAL FUND	0.40	8,550	2.00	50,103	2.00	51,398	2.00	51,398
CASH								
FEDERAL								

COMMENTS:

GENERAL:
The above budget for FY 81-82 is a continuation of previous years budget with no major changes or increases.

FUNDS:
All funds are requested from the State General Fund.

ADP BUDGET ANALYSIS

AGENCY DEPT. OF LOC. AFF. LOCAL GOVERNMENT

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	1.00	22,492	1.00	25,637	1.00	25,420	1.00	25,420
OPERATING EXPENSE		2,122		2,000		2,000		2,000
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL								
EQUIPMENT C/G								
EQUIPMENT SUB-TOTAL								
TOTAL	1.00	24,614	1.00	27,637	1.00	27,420	1.00	27,420
GENERAL FUND	1.00	24,614	1.00	27,637	1.00	27,420	1.00	27,420
CASH								
FEDERAL								

COMMENTS:

This is a continuing budget with no new major expenditures. Expenses within this budget are primarily associated with a Scientific Programmer (1.0 FTE $25,420). Secondary, there is a $2,000 continuing expenditure request for processing and producing the financial compendium.

SOURCE OF FUNDS:
All funds are requested from the State General Funds.

ADP BUDGET ANALYSIS

AGENCY DEPT. OF LOC. AFF. PLANNING

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	1.00	17,534	1.00	22,875	2.00	29,405	2.00	29,405
OPERATING EXPENSE		966		7,400		14,700		14,700
OPERATING EXPENSE OTHER		2,095		2,100				
EQUIPMENT -								
EQUIPMENT RENTAL						800		800
EQUIPMENT C/O				222,870		35,375		35,375
EQUIPMENT SUB-TOTAL				222,870		36,175		36,175
TOTAL	1.00	20,595	1.00	255,245	2.00	80,280	2.00	80,280
GENERAL FUND	1.00	20,595	1.00	246,909	2.00	34,999	2.00	34,999
CASH						45,281		45,281
FEDERAL				8,336				

COMMENTS:

The budget is basically a continuing budget except for equipment Capital Outlay category.

EQUIPMENT CAPITAL OUTLAY:
The $35,375 within this category represents the purchase of 300,000,000 bytes of disk storage necessary to accommodate other users. This acquisition will allow for the amortization of cost associated with the system. Cash income obtained from these users will pay for this equipment.

SOURCE OF FUNDS:

General Fund	34,999
Cash Income	45,281

ADP BUDGET ANALYSIS AGENCY DEPT. OF LOC. AFF. PROPERTY TAX

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	1.00	23,883	0.80	8,689	2.00	28,113	1.00	9,755
OPERATING EXPENSE		20,302		43,114		41,902		41,902
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		421		6,120		6,732		6,732
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL		421		6,120		6,732		6,732
TOTAL	1.00	44,606	0.80	57,923	2.00	76,747	1.00	58,389
GENERAL FUND	1.00	44,606	0.80	57,923	2.00	76,747	1.00	58,389
CASH								
FEDERAL								

COMMENTS:

PERSONAL SERVICES:
The additional programming position requested within the Division of Property Taxation is not recommended. One programming position used in Property Taxation application is currently in the Executive Director's Budget. In addition, an additional programmers position to be used for Property Taxation, is recommended within this report to be transferred from the General Government Computer Center to the Administration of Justice Computer Center. See related budget narratives within this document for dollar amounts.

The rest of the Division of Property Taxation budget is continuing.

SOURCE OF FUNDS:
All source of funds are requested from the State General Fund.

ADP BUDGET ANALYSIS AGENCY DEPT. OF MILITARY AFFAIRS

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES								
OPERATING EXPENSE								
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL				684		684		684
EQUIPMENT C/O		1,329		1,632		6,632		6,632
EQUIPMENT SUB-TOTAL		1,329		2,316		7,316		7,316
TOTAL		1,329		2,316		7,316		7,316
GENERAL FUND		1,329		2,316		7,316		7,316
CASH								
FEDERAL								

COMMENTS:

Communications provided by CLETA.

Recommendation includes $2,316 continuation for terminal and interfaces to CBI and being switchable to a Federal computer. The amount of $5,000 is approved for acquisition of a microprocessor for improvement in the Emergency Operations Center. Actual equipment approval for procurement is contingent upon full narrative justification at the time of request.

ADP BUDGET ANALYSIS

AGENCY DEPT. OF NAT. RES. ADMIN.

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	9.00	182,106	9.00	211,767	9.00	211,044	9.00	211,044
OPERATING EXPENSE		24,916		34,266		36,665		36,665
OPERATING EXPENSE OTHER		100		100		100		100
EQUIPMENT -								
EQUIPMENT RENTAL		11,372		13,124		14,604		14,604
EQUIPMENT C/O		17,760		22,452		23,462		23,462
EQUIPMENT SUB-TOTAL		29,132		35,576		38,066		38,066
TOTAL	9.00	236,254	9.00	281,709	9.00	285,875	9.00	285,875
GENERAL FUND		12,011		24,398		26,256		26,256
CASH		169,523		170,807		166,533		166,533
FEDERAL		54,720		86,504		93,086		93,086

COMMENTS:

To support current programs and a continuation of current FTE and funding levels.

ADP BUDGET ANALYSIS AGENCY DEPT. OF NAT. RES. WATER

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	5.00	31,354	5.00	58,235	5.00	61,300	5.00	61,300
OPERATING EXPENSE		54,159		57,711		66,020		66,020
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		19,901		20,100		23,680		23,680
EQUIPMENT C/O		19,997		1,500		2,300		2,300
EQUIPMENT SUB-TOTAL		39,898		21,600		25,980		25,980
TOTAL	5.00	125,411	5.00	137,546	5.00	153,300	5.00	153,300
GENERAL FUND		99,033		99,033		114,787	5.00	114,787
CASH		26,378		38,513		38,513		38,513
FEDERAL								

COMMENTS:

To support current programs and a continuation of current FTE and funding levels.

ADP BUDGET ANALYSIS

AGENCY DEPARTMENT OF PERSONNEL

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $
PERSONAL SERVICES	1.00	29,802	1.00	37,930	1.00	34,710	1.00	34,710
OPERATING EXPENSE		100,826		128,800		137,952		137,952
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		11,259		14,348		15,673		15,673
EQUIPMENT C/O		4,221						
EQUIPMENT SUB-TOTAL		15,480		14,348		15,673		15,673
TOTAL	1.00	146,108	1.00	181,078	1.00	188,335	1.00	188,335
GENERAL FUND	1.00	146,108	1.00	181,078	1.00	188,335	1.00	188,335
CASH								
FEDERAL								

COMMENTS:

This is a continuation budget at the same level of support. It contains one new terminal to support growth of existing applications, and for the new examination application system as in the approved ADP Master Plan.

ADP BUDGET ANALYSIS

AGENCY DEPT. OF PLANNING & BUDGET

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES								4,461
OPERATING EXPENSE		30,650		38,760				17,025
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL								
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL								
TOTAL		30,650		38,760				21,486
GENERAL FUND		30,650		38,760				21,486
CASH								
FEDERAL								

COMMENTS:

No request was submitted to DADP for review. Recommended column reflects amount to support ongoing systems in accordance with the GGCC budget request.

ADP BUDGET ANALYSIS AGENCY DEPT. OF REGULATORY AGENCIES

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	7.00	162,358	8.00	213,566	9.00	222,371	9.00	222,371
OPERATING EXPENSE		83,573		226,291		162,214		162,214
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		13,857		34,385		39,418		39,418
EQUIPMENT C/O		464						
EQUIPMENT SUB-TOTAL		14,321		34,385		39,418		39,418
TOTAL	7.00	260,252	8.00	474,242	9.00	424,003	9.00	424,003
GENERAL FUND	4.06	115,885	4.91	164,117	4.91	167,887	4.91	167,887
CASH	2.87	142,697	2.95	306,351	3.95	252,357	3.95	252,357
FEDERAL	0.07	1,670	0.14	3,774	0.14	3,759	0.14	3,759

COMMENTS:

1. PERSONAL SERVICES:
The increase of 1.0 FTE in the request year over the estimated year is in support of establishing an in house data entry operation. There is a sufficient amount of work for 1 data entry operator. The data entry operation will become more efficient through familiarization by the operator. This position will reduce the overload of the General Government Computer Center's Data Entry Operation.

2. OPERATING EXPENSE:
The request reflects a reduction of $12,320 for data entry services to the General Government Computer Center as a result of bringing the data entry functions "In House".

3. EQUIPMENT:
The request includes $1,000 for lease of a G.C.S. terminal for the data entry operator.

NOTE: The additional FTE will result in a $1,243 savings to the agency.

ADP BUDGET ANALYSIS — AGENCY DEPARTMENT OF REVENUE

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $
PERSONAL SERVICES	224.81	3,289,243	225.20	3,487,955	231.20	3,557,991	231.20	3,557,991
OPERATING EXPENSE		253,640		272,943		339,357		339,357
OPERATING EXPENSE OTHER		18,671		19,738		22,174		22,174
EQUIPMENT -								
EQUIPMENT RENTAL		492,187		572,794		775,945		775,945
EQUIPMENT C/O		80,679		366,924		495,809		495,809
EQUIPMENT SUB-TOTAL		572,866		939,718		1,271,754		1,271,754
TOTAL	224.81	4,133,820	225.20	4,720,354	231.20	5,191,276	231.20	5,191,276
GENERAL FUND	100.76	1,850,929	118.31	2,359,095	107.17	2,345,177	107.17	2,345,177
CASH	124.05	2,282,891	106.89	2,361,259	124.03	2,846,099	124.03	2,846,099
FEDERAL								

COMMENTS:

The Department of Revenue is moving in the direction of updating their Data Processing to the State-of-Art. A new Director of Data Processing was hired at the beginning of the fiscal year. A larger, single Central Processing Unit was installed in December, 1980, and the migration to a new operating system will commence later this fiscal year which shall increase productivity, and provide better service. The State-of-Art objective will take time to achieve but should produce long term savings. For the most part, this years budget request, although presented as a new request, is a continuation of the current year level of support for implementation of the recommendations in 1980 ADP Master Plan, Volume III, entitled Revenue Data Processing Task Force Study. The following represents new funds requested which are supported but were not considered as part of the implementation of the ADP Master Plan.

I. PERSONAL SERVICES:
The increase of 6.0 FTE in the request year over the Departments FY 1980-81 estimate is for the following purpose:

a. Five (5) data entry positions are requested in support of:

1. Annual growth estimated at six per cent based on an analysis of productive levels over the last three years.

2. Increased keystroke volume as a result of the new tax assessment data project.

3. The elimination of the check box on the State Income Tax form has created additional keystrokes to be entered into the system from the document.

b. One (1) software programmer position is requested and supported to assist in bringing their computer operations to the "State-of-Art". This position was considered as part of the ADP Master Plan. The net results of this position is a better level of service thus increasing productivity.

II. CAPITAL OUTLAY:

a. Funds of 55,000 dollars are requested to provide a fire detecting and extinquishing system in the computer room. This request is in support of the State Auditors recommendation and to provide protection for the State's assets.

b. Funds of 19,735 dollars are requested to replace 10% of the magnetic tape this year so that there is a planned 10-year replacement program. Magnetic tapes wear out causing errors and the possible need to rerun the job. Rerun time is expensive and takes computer resources.

c. Funds of 8,200 dollars are requested to replace the worn out 1973 Plymouth station wagon with a ½ panel truck.

ADP BUDGET ANALYSIS

AGENCY DEPT. OF SOCIAL SERVICES

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	29.00	671,894	31.00	833,037	32.00	861,476	32.00	860,210
OPERATING EXPENSE		208,224		384,865		427,403		427,403
OPERATING EXPENSE OTHER		2,187,231		1,780,000		837,896		837,896
EQUIPMENT -								
EQUIPMENT RENTAL		107,014		166,174		353,894		353,894
EQUIPMENT C/O						82,500		8,250
EQUIPMENT SUB-TOTAL		107,014		166,174		436,394		362,144
TOTAL	29.00	3,174,363	31.00	3,164,076	32.00	2,563,169	32.00	2,487,653
GENERAL FUND	8.70	690,992	9.30	968,853	9.60	1,291,481	9.60	1,216,693
CASH								
FEDERAL	20.30	2,483,371	21.70	2,195,223	22.40	1,271,688	22.40	1,270,960

COMMENTS:

PERSONAL SERVICES:
The request is for an operations manager to handle network management and daily production problems. There is also a need for additional software support of the Medicaid Management Information System (MMIS). The recommendation is for a Senior Systems Analyst to perform both network coordination and MMIS system support. This is lower than the operations manager level, and a more appropriate classification.

OPERATING EXPENSE:
This includes a request for $405,253 for data creation, compared to $364,522 estimated for 1980-81. This reflects only the normal growth and inflation factors.

OTHER OPERATING EXPENSE:
This is the COIN project, which is 90% federally funded in 1981-82. It was previously 100% federal. The concept is a major part of the approved ADP Master Plan for Social Services.

EQUIPMENT:
The request includes funding to continue expansion of the telecommunications and remote job entry network. It includes Vocational Rehabilitation sites at Northglenn, Montrose, Garfield, Fremont, Otero, Las Animas, Rio Grande and Adams counties.

The $82,500 Capital Outlay requested is for the purchase of 15 mini-computers for use by 20 small counties which can be used both in the network and as standalone devices. The recommendation of $8,250 is made based on anticipated delays and the securing of Federal matching funds under the COIN project.

ADP BUDGET ANALYSIS AGENCY DEPARTMENT OF STATE

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES			1.00	25,611	1.00	34,050	2.00	64,936
OPERATING EXPENSE		233,035		123,540		51,225		15,000
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		22,944		22,944		25,116		25,116
EQUIPMENT C/O								
EQUIPMENT SUB-TOTAL		22,944		22,944		25,116		25,116
TOTAL		255,979	1.00	172,095	1.00	110,391	2.00	105,052
GENERAL FUND		255,979	1.00	172,095	1.00	110,391	2.00	105,052
CASH								
FEDERAL								

COMMENTS:

PERSONAL SERVICES:
The Division of ADP recommends the addition of 1 FTE for ongoing systems analysis, programming and programming maintenance previously performed by the General Government Computer Center. A reduction of this FTE should appear in the GGCC budget recommendation.

OPERATING EXPENSE:
The reduction of $36,225 is the amount of operating monies paid to GGCC for the above mentioned system analysis, programming and maintenance of ongoing systems. Naturally, this will have to be appropriated if the additional FTE is not approved and funded.

EQUIPMENT RENTAL:
The Division of ADP approves the addition of 1 CRT and 1 Line Printer for 1981-82.

ADP BUDGET ANALYSIS AGENCY DEPARTMENT OF TREASURY

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$
PERSONAL SERVICES	0.50	6,021	0.50	12,026	0.50	11,200	0.50	11,200
OPERATING EXPENSE		34,046		25,750		20,272		20,272
OPERATING EXPENSE OTHER								
EQUIPMENT -								
EQUIPMENT RENTAL		492		1,521		1,712		1,712
EQUIPMENT C/O				23,150		7,500		7,500
EQUIPMENT SUB-TOTAL		492		24,671		9,212		9,212
TOTAL	0.50	40,559	0.50	62,447	0.50	40,684	0.50	40,684
GENERAL FUND	0.50	40,559	0.50	62,447	0.50	40,684	0.50	40,684
CASH								
FEDERAL								

COMMENTS:

1. PERSONAL SERVICES:
   A. The estimate year includes a $4,000 expenditure for programming services to convert the programs that were being run at the University of Colorado to the Hewlitt Packard 3000 at the Department of Education. This expenditure was made necessary by the resignation of the person with the programming expertise to accomplish the conversion.

   B. The request year includes a $2,400 expenditure for maintenance of the programs.

2. EQUIPMENT:
   The request year reflects a $7,500 expenditure to purchase statistical multiplexors for the terminals. The multiplexors are required because of the distance between the terminals and the computer and the extreme need for accurate transmission of data.

ADP BUDGET ANALYSIS INSTITUTION ADAMS STATE COLLEGE NUMBER 270620 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	5.70	90,396	6.50	104,961	6.50	111,647	6.50	111,647	6.50	111,647
OPERATING EXPENSE		9,381		15,044		28,914		28,914		28,914
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		40,191		44,984		50,382		50,382		50,382
EQUIPMENT C/O						60,000		60,000		60,000
EQUIPMENT SUB-TOTAL		40,191		44,984		110,382		110,382		110,382
TOTAL	5.70	139,968	6.50	164,989	6.50	250,943	6.50	250,943	6.50	250,943
GENERAL FUND	5.60	128,048	6.00	150,028	6.00	242,943	6.00	242,943		
CASH		2,000								
FEDERAL										
SALARY ACT		6,508		7,961						
OTHER	0.10	3,412	0.50	7,000	0.50	8,000	0.50	8,000		

REQUEST YEAR 1981-82

- Continue training of faculty and staff in the use of the new computer and related software.
- Install the new computer system and operate it in parallel with the old system until conversion is completed.
- Install TV cable and/or telephone lines to accommodate all the CRT units that will be used on the new system.
- Student oriented CRT operations will be given implementation priority.

BUDGET INCREASE SUMMARY

A. 7% Request Budget

- Additional PERA Cost .26%	229
- Merit Increases, Classified Staff	1.903
- Minimum Hourly Wage Increases	260
- Other Current Expense Increases	15,167
- Increased Travel Allowance	50
- Compensation Increases, Professional Staff 5%	1,429
Total	19,038
- Capital Outlay - New PDP 11/70 Computer System	60,000

B. Full Request Budget

- Additional PERA Costs .26%	229
- Merit Increases, Classified Staff	1,903
- Other Current Expense Increase	18,143
- Compensation Increases, Professional Staff 12%	3,618
- Hourly Wage Increase 4.00/hr.	936
- Increased Travel Allowance	125
Total	24,954
- Capital Outlay - New PDP 11-70 Computer System	60,000

RECOMMENDATIONS:
The Division of ADP supports the full request budget for 1981-82 as submitted.

ADP BUDGET ANALYSIS INSTITUTION ARAPAHOE COMM. COLLEGE - ADMIN. DATA PROCESSING NUMBER 270715 SCHEDULE A

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	6.00	98,540	6.00	114,692	8.00	164,917	7.00	140,154	7.00	140,154
OPERATING EXPENSE		6,002		2,390		7,085		6,935		6,935
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		19,732		20,300		23,725		23,200		23,200
EQUIPMENT C/O						30,250		2,300		2,300
EQUIPMENT SUB-TOTAL		19,732		20,300		53,975		25,500		25,500
TOTAL	6.00	124,274	6.00	137,382	8.00	225,977	7.00	172,589	7.00	172,589
GENERAL FUND										
CASH										
FEDERAL										
SALARY ACT										
OTHER										

ADMINISTRATION COMPUTER SUPPORT

Estimate Year

Develop the foundation for comprehensive student data base that will include demographic data, financial aids data, veterans records, health data and other student information written under ADABAS at GGCC.

Interface the payroll, personnel and accounting systems for automatic salary emcumbrance and liquidation.

Maintain service to administrative users while the data base is being developed through the operation of a dual system for Student Services requirements during the testing and implemenation of the data base.

REQUEST YEAR OBJECTIVES AND JUSTIFICATIONS:

A. Objective: With a solid data base foundation, the College plans to build a system of reported information. Student and financial aid data will be reconciled to the IAI Accounting System. This will provide a natural interface into an accounts receivable system.

Request:

1.0 Programmer	$22,427
2 CRT's	4,600
1 Terminal Printer	4,500
Upgrade to Controller	500

Justification: Although the data base will solve the problem of duplicate data in admissions and financial aid, the Computer Services Department must also provide the controls and processes for financial aid to be merged and reconciled to the financial accounting system. This is the major purpose of the data-base development.

B. Objective: Implement an on-line registration system that will handle between 6,000 and 7,000 students (head count). The software to do the registration is being developed within the community colleges on a shared basis. Once this system is in operation the Computer Services Department will interface data from the mini-computer registration with the student data base.

Request:

.5 FTE Programmer position	$11,214
1 CRT	$ 2,300

Justification: Controlling the budget and purchasing process is very important to the College and the State. Problems are often discovered late in these processes, resulting in time consuming corrections and costly expenditures of manpower. The College must furnish the purchasing function with access to budget and vendor information on a more timely and accurate basis and provide summarized accounting information to various other functions of the institution without delay. With tight budgets there is a serious need for more effective controls such as will be provided through the acquisition of the required on-line inquiry capability.

DIVISION OF ADP RECOMMENDATION:

Objective A - is not recommended (FY 81-82) until a general direction and plan is developed that addresses this issue for all community colleges using a data-base system.

Objective B - is recommended. With the current objective of multi-use application software among the community colleges this FTE should be for the implementation period only and should not be on-going in FY 82-83.

Objective C - is not recommended until a plan is developed for all community college users of HEFAS (IAI). That plan must address all users for on-line access to the HEFAS Accounting files.

ADP BUDGET ANALYSIS — INSTITUTION ARAPAHOE COMM. COLLEGE - INSTRUCTION COMPUTING — NUMBER 270715 SCHEDULE 8

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	0.10	1,920	0.20	4,000	0.30	6,000	0.30	6,000	0.30	6,000
OPERATING EXPENSE		1,700		1,750		2,300		2,300		2,300
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		3,000		9,028		19,268		16,500		16,500
EQUIPMENT C/O				40,000		85,114		80,050		80,050
EQUIPMENT SUB-TOTAL		3,000		49,028		104,382		96,550		96,550
TOTAL	0.10	6,620	0.20	54,778	0.30	112,682	0.30	104,850	0.30	104,850

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

RESIDENT INSTRUCTION COMPUTER SUPPORT* (From Schedule 402)

Program Description
Resident Instruction Computer Support offers instruction in Introduction to Computer Science as well as instruction in BASIC, COBOL, PASCAL and FORTRAN languages. Students are also instructed in the process of key punching and preparing computer card decks.

Instruction computing courses provide educational support for these programs.

Associate of Arts
Computer Science courses meet degree requirements in Math and Science and provide students with the tools to pursue further work in technical applications.

Associate of Applied Science (Business)
Computer applications in business are increasing at a rapid rate. This course work provides students with a foundation in business computer applications.

Certificate in Computer Programming and Operations
This is a "hands-on" program that will put students on the job as quickly as possible. In addition to these practical vocational courses, students need some theoretical courses to support their vocational programs.

Program Accomplishments

Actual Year
During the academic year of 1979-80, 86.1 FTE students were served.

A new course in PASCAL programming language was developed and offered.

Computer Science courses were filled to capacity and students were turned away, indicating that demand was not being satisfied. Additional courses could not be added because of lack of staff and equipment.

As part of a long-range program to strengthen computer instruction, the college has purchased a DEC PDP 11/44 Digital Equipment minicomputer. A computer laboratory has been established that will contain 12 student CRT stations, together with printers, key punches and card readers. Equipment delivery is expected by February 1981.

A 1.0 FTE position for a full-time instructor in computer science was authorized. The applicant screening process was begun in late 1979-80.

NOTE: Instructional computing suffered from a lack of modern hardware. Equipment down-time and excessive turn-around time have reduced the efficiency of this program.

Estimate Year
Projected student FTE is 95.6 but enrollment for Fall Quarter 1980 indicates that this figure will be exceeded.

A computer science instructor will be hired.

Based on guidelines issued by the Colorado Commission of Higher Education, the computer science instruction staff should total 4.3 FTE. The actual total is 1.5 FTE. This lack of staff is a major factor in the inability of the College to adequately meet student requirements.

REQUEST YEAR OBJECTIVES AND JUSTIFICATIONS

Objective: Provide computer science education for 105 student FTE during the 1981-82 academic year.

Request: 2.0 FTE positions and $39,364 will be needed to maintain the level of instructional computing.

Justification: A 1.0 FTE position has been added to accommodate the growth that this discipline will continue to experience. The requested $54,000 is required to meet annual payments for the DEC PDP 11/44. The required software and maintenance of the new equipment will cost $33,382 in the request year.

Objective: Upgrade the DEC PDP 11/44 so that 8 additional CRT's can be handled.

Request:	Additional CRT's	$10,000
	Additional Ports	2,450
	Additional memory	6,400
	Disk	11,200
	TOTAL	$30,050

Justification: The original configuration of the DEC PDP 11/44 was designed to handle 12 teaching terminals (CRT's) and 4 administrative terminals. The existing 12 student terminals are situated in the computer laboratory and are being used primarily by Computer Science students who are taking language courses. An expansion of computer usage is planned as follows:

CMI - Computer-Managed Instruction
The Computer will be used for student testing, grading and record keeping. Most text book publishers provide computerized test banks that can be placed in the computer memory for access by instructor and students.

CAI - Computer-Assisted Instruction
This is a broad field of computer application and possibilities for use are extensive. Initial plans of the College include the following applications:

Principles of Accounting
A software package will be purchased that is coordinated with the text book. Practice sets and assigned problems will be worked by the students directly at the terminal.

Programmed Instruction
The College offers several personalized systems of instruction courses that can be effectively handle by the computer.

Gaming and Modeling
Software packages are available that can be used to supplement instruction courses. As an example, Marketing students will be required to make marketing-mix decisions that they will input to the program. They will then compare results with that of their competition.

The additional terminals would be located in the teaching areas, e.g., accounting classrooms and marketing classrooms.

Objective: Purchase software for the DEC PDP 11/44 to support teaching activities.

Request.	Equipment upgrade	$31,114
	Software	4,000

Justification: Computer-managed instruction cannot be accomplished without proper software, College personnel can develop some of the needed programs, but the more elaborate and sophisticated programs can be purchased for less than it would cost to develop the programs with College personnel.

DIVISION OF ADP RECOMMENDATION:
The $40,000 1980-81 estimated Capital Outlay expenditure is based on a request supplemental. If the supplemental is not granted the college has stated that Resident Instruction funds must be used to cover the initial computer acquisition costs.

The Division recommends a committed FY 81-82 payment of $54,000 (C/O) for the initial procurement of the instructional mini-computers. This computer was recommended last year as 5th priority item. The Division also recommends the support of the instructional program. Additional CRT's/Ports/Memory and a disk drive will be needed. This equipment should be acquired for $21,050. The $4,000 for instructional software is recommended.

It is apparant that Arapahoe CC requested the equipment Capital Outlay on schedule 454B and that all other related support costs are proposed to be derived from Resident Instruction fund. DADP does not review the Resident Instruction program budget.

ADP BUDGET ANALYSIS INSTITUTION ARAPAHOE COMM. COLLEGE NUMBER 270715 SCHEDULE 2

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $	1981-82 FTE/ADV.BOARD	1981-82 $
PERSONAL SERVICES	6.10	100,460	6.20	118,692	8.30	170,917	7.30	146,154	7.30	146,154
OPERATING EXPENSE		7,702		4,140		9,385		9,235		9,235
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		22,732		29,328		42,993		39,700		39,700
EQUIPMENT C/O				40,000		115,364		82,350		82,350
EQUIPMENT SUB-TOTAL		22,732		69,328		158,357		122,050		122,050
TOTAL	6.10	130,894	6.20	192,160	8.30	338,659	7.30	277,439	7.30	277,439
GENERAL FUND	6.00	119,771	6.00	128,686	8.00	311,091	7.00	249,871		
CASH										
FEDERAL										
SALARY ACT		7,894		8,696						
OTHER	0.10	3,229	0.20	54,778	0.30	27,568	0.30	27,568		

ADP BUDGET ANALYSIS — INSTITUTION COLO SCHOOL OF MINES - STATE FUNDED — NUMBER 270300 SCHEDULE A

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	17.00	358,486	18.90	469,844	20.20	555,566	18.90	477,668	18.90	477,668
OPERATING EXPENSE		29,564		36,900		35,840		35,840		35,840
OPERATING EXPENSE OTHER		1,555		21,500		24,200		24,200		24,200
EQUIPMENT -										
EQUIPMENT RENTAL		89,349		158,400		188,740		168,933		168,933
EQUIPMENT C/O		352,152		284,861		284,861		284,861		284,861
EQUIPMENT SUB-TOTAL		441,501		443,261		473,601		453,794		453,794
TOTAL	17.00	831,106	18.90	971,505	20.20	1,089,207	18.90	991,502	18.90	991,502
GENERAL FUND	17.20	826,297	18.90	901,505	20.20	989,207	18.90	911,502		
CASH		25,578		70,000		100,000		80,000		
FEDERAL										
SALARY ACT	-.20	-6,235								
OTHER		-14,534								

REQUEST FISCAL YEAR 1981-82

With minor exceptions, such as improvement in computer graphics capabilities, and probably further expansion of laboratory computers, the physical facilities for computing at the Colorado School of Mines will be adequate for the request year. Emphasis during the year will continue to be that of Fiscal Year 1980-81, i.e: to improve the quality of computing on campus. In administration, applications will be improved and movement made toward further user control of the system. Proprietary software will be sought for hastening this process. In instruction, the emphasis of User Services will be to teach both faculty and students how to make effective and efficient use of the computer, how to aid the faculty in developing new applications, and the installation of additional proprietary software packages useful in engineering instruction. The Small Computer Group will emphasize laboratory hardware and software and the ability to communicate between the small computers and the central computers.

The Cyber facility is expected to require some expansion in its on-line storage facility as the number of applications grow. Conversion to a single operating system should have been completed and operations stabilized so that the Cyber can be a useful, self-supporting research computer for all of Geophysics and some of the rest of the campus without diluting the seismic processing efforts.

The one area of expected need for systems expansion is in communications. All ports of the communication system serving the three major computers will have been subscribed with expected heavy use. A 20 percent expansion in the DCA communications systems will be necessary in order to avoid a bottleneck in computer use by instruction, administration and research.

Data Processing Equipment

The old PDP-10 computer was replaced in 1979-80. Continuing annual payments for the new computer are $268,400 and $16,461 for the printer which was previously installed. The total annual commitment is $284,861.

DIVISION OF ADP RECOMMENDATION/GENERAL FUND

Based on the two line appropriation for FY 80-81, the institution has developed a program statement for computing support. These statements do not describe or explain the specifics of the requested items or the dollars related to any given item. Therefore, the Division's recommendation is based on 7% of the institutional allocation for operating expense in FY 80-81. (Excludes Personnel Services and Capital Outlay).

ADP BUDGET ANALYSIS INSTITUTION COLO SCHOOL OF MINES - GEOPHY-SEISMIC DEPT. NUMBER 270300 SCHEDULE B

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	1.60	42,911	5.70	128,157	7.50	135,765	7.50	135,765	7.50	135,765
OPERATING EXPENSE		38,408		25,400		27,900		27,900		27,900
OPERATING EXPENSE OTHER		148,380		37,400		45,000		45,000		45,000
EQUIPMENT -										
EQUIPMENT RENTAL		98,652		156,800		155,000		155,000		155,000
EQUIPMENT C/O		1,867,042		105,000						
EQUIPMENT SUB-TOTAL		1,965,694		261,800		155,000		155,000		155,000
TOTAL	1.60	2,195,393	5.70	452,757	7.50	363,665	7.50	363,665	7.50	363,665
GENERAL FUND										
CASH										
FEDERAL	1.60	2,195,393	5.70	452,757	7.50	363,665	7.50	363,665		
SALARY ACT										
OTHER										

ADP BUDGET ANALYSIS INSTITUTION COLO SCHOOL OF MINES NUMBER 770300 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	18.60	401,397	24.60	598,001	27.70	691,331	26.40	613,433	26.40	613,433
OPERATING EXPENSE		67,972		62,300		63,740		63,740		63,740
OPERATING EXPENSE OTHER		149,935		58,900		69,200		69,200		69,200
EQUIPMENT -										
EQUIPMENT RENTAL		188,001		315,200		343,740		323,933		323,933
EQUIPMENT C/O		2,219,194		389,861		284,861		284,861		284,861
EQUIPMENT SUB-TOTAL		2,407,195		705,061		628,601		608,794		608,794
TOTAL	18.60	3,026,499	24.60	1,424,262	27.70	1,452,872	26.40	1,355,167	26.40	1,355,167
GENERAL FUND	17.20	826,297	18.90	901,505	20.20	989,207	18.90	911,502		
CASH		25,578		70,000		100,000		80,000		
FEDERAL	1.60	2,195,393	5.70	452,757	7.50	363,665	7.50	363,665		
SALARY ACT	-.20	-6,235								
OTHER		-14,534								

ADP BUDGET ANALYSIS INSTITUTION COLO STATE UNIV. - ACADEMIC CENTER NUMBER 270400 SCHEDULE A

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $	1981-82 FTE/ADV.BOARD	1981-82 $
PERSONAL SERVICES	24.50	504,680	24.50	524,828	24.80	530,366	24.50	517,633	24.50	517,633
OPERATING EXPENSE		88,798		119,001		113,231		119,001		119,001
OPERATING EXPENSE OTHER		59,797		76,848		106,120		76,848		76,848
EQUIPMENT -										
EQUIPMENT RENTAL		454,682		512,212		588,944		512,212		512,212
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		454,682		512,212		588,944		512,212		512,212
TOTAL	24.50	1,107,957	24.50	1,232,889	24.80	1,338,661	24.50	1,225,699	24.50	1,225,699
GENERAL FUND										
CASH										
FEDERAL										
SALARY ACT										
OTHER										

REQUEST YEAR OBJECTIVES AND JUSTIFICATION

Objective: To fulfill the on-going responsibilites of Computing Services with personnel and other current expense and travel budgets that will permit professional, effective, and efficient operation.

Request: The request for on-going programs includes an increase of 15.0% for exempt staff compensation, a 10% wage increase for hourly personnel, and an increase of 1.5% on the base cost of state classified personnel (annualization of prior year merit increases for state classified employees). The increases requested for other current expenses to meet inflationary price changes average 12.0%. The 12.0% average increase is in line with the indices recommended for use by the Office of State Planning and Budgeting (OSPB) for 1981-82 requests, it takes into account the necessary weighting for the CSU mixture of purchases and gives recognition to the generally higher (than national) price changes for Colorado. The crucial OSPB recommended indices are shown below.

OSPB Index	Application at CSU	OSPB Index Increase for 1981-82 (Percent)
Gasoline	Petroleum-based laboratory and agricultural supplies	18.7
Postage	Postage	33.3
State & Local Govt. Purchases	All other items under Other Current Expense	8.6
Transportation	Travel	9.3

The requested increase of 1.0% for travel is in accord with the OSPB recommended index increase of 9.3% for transportation and 18.7% for gasoline. Much of the travel in this program is in-state by automobile.

Justification: Salary increases for exempt staff are requested to maintain compensation levels commensurate with duties performed and comparable to salaries paid professionals in higher education, industry, and government having similar training, experience, and responsibility. Increases requested for travel and other current expenses reflect increased costs due to inflation.

11.1.4 New Programs Objectives and Justifications

Objective: With one relatively modest exception, the computing services departments make no new requests for funds. According to university guidelines, the 80/81 operating budgets are carried forward on the basis of common formulae, applied to various budget sections.

The purpose of the new budget request is to support communications equipment that would connect approximately 50 additional on-line terminals to be operated within administrative offices across campus. These terminals are to be used to accomplish on-line student registration, management of student records, data collection for the new financial accounting system and on-line query into the student records and financial data files.

Request: The request for new program funds of $16,500 would add to the base budget as continuing cost. Altogether, the requested increases compute to 6.75% of the estimated base budget for 1980-81.

Increase for On-Going Programs	$124,625
New Program Request	16,500
Total Increase Requested	$141,125

Justification: The net value of these on-line procedures is inestimable but is expected to result in complete modernization of the student registration process and in the purge of scores of independent departmental and project account system that have grown into the university over the past years.

If this plan is provided for, it is expected that individual departments and programs would be responsible for the purchase of their own terminals and would support on-going operating costs from their individual budgets.

The 7% Request

In order to quickly compare the request year objectives (full request) with the constraints of the "7% General Fund Increase", the following tables are included.

The table entitled Analysis of Items Excluded from 1981-82 "Full Request" to meet 7% General Fund Increase Limitation identifies the specific expenditure item reductions that were made in the 1981-82 CSU Budget Request in order to stay within the mandated "7% General Fund Increase" limitation.

DIVISION OF ADP RECOMMENDATION:
The Division recommendation is "as requested" under the 7% guidelines.

The Division also requests that a cooperative effort be initiated between Colorado State University to study and propose a solution to current rules and regulations of HEW/Grant and contract and subsequent audit processes. (See University of Colorado).

ADP BUDGET ANALYSIS INSTITUTION COLO STATE UNIV. - ADMINISTRATION NUMBER 270400 SCHEDULE B

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	35.70	705,815	35.90	824,148	35.90	842,436	35.90	829,022	35.90	829,022
OPERATING EXPENSE		66,890		26,878		40,105		26,878		26,878
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		23,493		22,603		25,316		22,603		22,603
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		23,493		22,603		25,316		22,603		22,603
TOTAL	35.70	796,198	35.90	873,629	35.90	907,857	35.90	878,503	35.90	878,503

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

ADP BUDGET ANALYSIS INSTITUTION COLO STATE UNIV. - CASH CENTER NUMBER 270400 SCHEDULE C

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $	1981-82 FTE/ADV.BOARD	1981-82 $
PERSONAL SERVICES	16.40	336,671								
OPERATING EXPENSE		85,794								
OPERATING EXPENSE OTHER		149,220								
EQUIPMENT -										
EQUIPMENT RENTAL		276,723								
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		278,723								
TOTAL	16.40	850,408								
GENERAL FUND										
CASH										
FEDERAL										
SALARY ACT										
OTHER										

ADP BUDGET ANALYSIS INSTITUTION COLO STATE UNIV. NUMBER 270400 SCHEDULE 2

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $	1981-82 FTE/ADV.BOARD	1981-82 $
PERSONAL SERVICES	76.60	1,547,166	60.40	1,348,976	60.40	1,372,802	60.40	1,346,660	60.40	1,345,663
OPERATING EXPENSE		241,482		145,879		173,386		145,879		145,879
OPERATING EXPENSE OTHER		209,017		76,848		86,070		76,848		75,540
EQUIPMENT -										
EQUIPMENT RENTAL		756,898		534,815		614,260		534,815		534,815
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		756,898		534,815		614,260		534,815		534,815
TOTAL	76.60	2,754,563	60.40	2,106,518	60.40	2,246,518	60.40	2,104,202	60.40	2,104,202
GENERAL FUND	60.20	1,816,723	60.40	1,970,248	60.40	2,246,518	60.40	2,104,202		
CASH	16.40	850,408								
FEDERAL										
SALARY ACT		111,618		136,270						
OTHER		-24,186								

ADP BUDGET ANALYSIS INSTITUTION COMM. COLL. OF DENVER - ADMIN. DATA PROCESSING NUMBER 270730 SCHEDULE A

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BDARD	$
PERSONAL SERVICES	17.60	298,385	18.00	364,837	18.20	379,551	18.20	379,551	18.20	379,551
OPERATING EXPENSE		21,669		17,690		23,750		19,250		19,250
OPERATING EXPENSE OTHER		9,075		8,000		25,466		19,568		19,568
EQUIPMENT -										
EQUIPMENT RENTAL		38,091		35,791		43,622		38,870		33,370
EQUIPMENT C/O						38,000		20,000		20,000
EQUIPMENT SUB-TOTAL		38,091		35,791		81,622		58,870		53,370
TOTAL	17.60	367,420	18.00	426,318	18.20	510,389	18.20	477,359	18.20	477,359

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

ADMINISTRATIVE COMPUTING

At the request of the State Board and in cooperation with the State Division of ADP, some preliminary coordinating, systems analysis, and programming support was provided to the Higher Education Financial Accounting System (HEFAS) project. The intent of the project is to install a common accounting system for all colleges in the State Board system.

ESTIMATE YEAR

1. To continue timely production processing from existing systems.
2. To continue system and program maintenance and to complete required modifications to existing application systems in response to user needs.
3. To install the newly developed on-line registration system on the Auraria and Red Rocks minicomputers.
4. To develop a student system to provide Community Services that portion of a registrar service that they require.
5. At the request of the State Board of Community Colleges and Occupational Education and the State of Colorado Division of ADP, to implement and operate the HEFAS system, acquired by the Board at Lamar, Otero, Trinidad and Pikes Peak Community Colleges.
6. To coordinate the acquisition of word processing equipment to establish word processing centers on the three campuses.

REQUEST YEAR OBJECTIVES

A. Objective: To provide for salary and general price level increases.

Request:		
	0.0 FTE Exempt	$ 3,706
	0.0 FTE Exempt	5,623
	Other Current Expense	4,814
	Travel	512
		$14,655

Justification: This request is to retain the purchasing power of the current appropriation, based on price level indices 8.6% in general governmental purchases and 9.3% in travel, as projected by the Office of State Planning and Budgeting. Added to classified compensation at the recommendation of the Division of ADP is 1.5% to reflect annualization of merit increases.

The exempt compensation increase requested is 9.5%, based on comparability surveys and federal guidelines.

B. Objective: To provide support for the operation and maintenance of the Higher Education Financial Accounting System (HEFAS) project.

Request:	0.2 FTE Classified	$ 5,386
	Other Current Expense	1,500
	Travel	3,000
	ADP Capital Outlay	3,000
		$12,886

Justification: The State Board for Community Colleges and Occupational Education, in conjunction with the State of Colorado Division of ADP, fostered the implementation of the HEFAS system. The immediate intent of this system is to provide a common accounting system for all institutions in the State Board system. The Community College of Denver, ADP Division, has been assigned the project. Some initial work was done in budget year 1979-80 out of CCD resources, and .8 FTE were appropriated by the legislature for the project in budget year 1980-81. The appropriation is not consistent with the required resources for CCD to implement and operate the system. The additional resources required, identified above, include paper and other incidental costs, travel expenses, and terminal equipment for system change and monitoring. Since a full-time programmer is required on the project, restoration of .2 FTE is also requested.

C. Objective: To connect the Red Rocks and North Campuses Learning Materials Centers to the existing AHEC automated library system.

Request:	Other Current Expense	$21,530
	ADP Capital Outlay	20,000
		$41,530

Justification: The request is for funds to purchase the software and hardware to participate in the existing AHEC automated library system. Membership in the system would achieve better circulation control resulting in the reduction of loss of materials, in better utilization of existing material between campuses by reducing unnecessary duplication, and making more material available to each campus by materials sharing.

D. Objective. To utilize the word processing function of the POISE Student Services System.

Request:	ADP Capital Outlay	$15,000

Justification: During Budget year 1979-80, CCD acquired a software package to allow registration of student on-line. A feature of the package is a word processing capability. In order to use the feature, a special printer is required. This request is for funding for three of these printers, one for each campus. The use of the word processing function will allow the Admissions and Records offices to efficiently provide a better, more individualized service to students by generating correspondence that directly assesses information on the Student Information Files. This use will save some materials costs and will reduce clerical workloads and costs. Clerical personnel are currently being diverted from other badly needed areas to perform this service manually.

FIVE-YEAR PLAN

The ADP Plan for the College is multi-staged. Short-range objectives include stabilizing the operations of existing applications so that timely, accurate information is being produced. After achieving this objective, existing application systems will be modified and/or enhanced to meet user needs within the limitations of system design. Running parallel with the modifications will be the process of identification and implementation of new application systems aimed at data automation of the remaining major College administrative functions. The final stage of the plan is to implement a College-wide management information system which will feature a process-oriented, DBMS controlled, data base which will be updated, maintained, and accessed through a College telecommunications network.

Budget Year 1977-78 emphasized stabilizing production from existing systems with some modifications and some new equipment. Budget years 1978-79, 1979-80, 1980-81, and the Request Year emphasize new development and movement of systems and equipment to on-line inquiry and update processing techniques.

DIVISION OF ADP RECOMMENDATION:

Objective A is recommended based on normal inflation.

Objective B is recommended to support the central programs of the Community Colleges Accounting System (HEFAS).

Operating expense for Objective C ($21,530) is recommended at ½ year based on installation time. $20,000 Capital Outlay for this objective is recommended.

Objective D is not recommended for FY 81-82. A study must be conducted to determine the Cost/Benefit of word processing on multi-purpose mainframe computer support systems.

ADP BUDGET ANALYSIS INSTITUTION COMM. COLL. OF DENVER - INSTRUCTION COMPUTING NUMBER 270730 SCHEDULE B

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	3.30	40,855	5.20	76,889	9.20	123,919	8.20	112,797	8.20	112,797
OPERATING EXPENSE		15,642		8,231		8,959		8,959		8,959
OPERATING EXPENSE OTHER		21,534		16,543		17,966		17,966		17,966
EQUIPMENT -										
EQUIPMENT RENTAL		58,584		107,196		116,415		116,415		116,415
EQUIPMENT C/O						49,000		29,000		29,000
EQUIPMENT SUB-TOTAL		58,584		107,196		165,415		145,415		145,415
TOTAL	3.30	136,615	5.20	208,859	9.20	316,259	8.20	285,137	8.20	285,137

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

INSTRUCTIONAL COMPUTING

ESTIMATE YEAR

1. Install a DEC 11/44 at Auraria and Red Rocks Campuses with a connection from the Aurora Education Center to the Auraria computer.

2. Provide advising service and on-campus consulting in the instructional use of the mini-computers for both computing courses and non data processing program support.

3. Provide system manager support coordinating the tri-campus instructional computing network.

REQUEST YEAR OBJECTIVES

A. Objective: To provide for salary and general price level increases.

Request:

0.0 FTE Exempt	$ 5,786
0.0 FTE Classified	430
Other Current Expense	9,595
Travel	192
	$16,003

Justification: This request is to retain the purchasing power of the current approriation, based on price level indices of 8.6% in general governmental purchases and 9.3% in travel, as projected by the Office of State Planning and Budgeting. At the recommendation of the Division of ADP 1.5% is added to classified salaries for annualization of merit increases.

The exempt compensation increase consists of two components: A 15% increase for personnel on nine-month appointments and classified as faculty, and a 12% increase for other exempt personnel. Of the increment granted nine-month personnel in 1980-81, only a portion served to improve comparability in pay with faculty salaries in similar institutions. A large amount of the increment simply met inflationary trends and general salary level increase elsewhere. A 15% increment is needed to meet the anticipated continuation of these trends and to complete the movement toward pay comparability for Colorado Community College instructors.

The increase requested for administrators is 9.5%, based on comparability surveys and federal guidelines.

The compensation increase requested may be broken down as $4,283 for nine-month personnel and $1,353 for twleve-month personnel.

The request provides $56 for funding the increased PERA rate for a full twelve months.

B. Objective: To provide instructional computing laboratory personnel for full utilization of the instructional computing equipment.

Request: 3.0 FTE Exempt $30,011

Justification: The enrollment of data processing classes increased dramatically after the installation of the interactive instruction computing equipment at North Campus. The computers and equipment are expensive, complex pieces of equipment which require trained personnel for their operation.

Because of the increased demand by students to access a limited number of terminals, and because a large portion of CCD's ADP courses are offered at night, three additional Instructional Lab Associates are required to keep the labs open for extended periods during the week and on Saturdays.

C. Objective: To augment existing DEC mini-computer system.

Request: ADP Capital Outlay $20,000

Justification: During the first year of operating the DEC 11/34 at North Campus, it has become clear that a tape drive in necessary for installing the maintenance changes and upgrades to the operating system and on-line registration system software. This request is for a tape drive. All of our system changes will be made at one campus with tape drive and distributed to the other campuses on disk. The College is currently renting a tape service to accomplish this need.

D. Objective: To provide for expected growth in enrollment ADP courses.

Request: ADP Capital Outlay $29,000

Justification: Community College of Denver has attempted to install DEC equipment configurations that are minimum for the College's current instructional needs. Experience at North Campus indicates a great need and demand for interactive data processing instruction. In order to serve expected similar demands at Red Rocks and Auraria campuses, additional disk space for program and data storage is necessary. This request is for one additional student work station at North Campus. It is expected that restriction of course offerings will be required in the absence of this additional storage.

E. Objective: To provide adequate support for operation of the instructional computing equipment at the Aurora Education Center to provide assistance to students and faculty who use the facilities, while maintaining equipment security.

Request: 1.0 FTE Exempt Staff $10,037

Justification: During budget year 1979-80, the Aurora Education Center acquired new and used data processing equipment in support of the computing courses taught there. Because of the limited number of stations fro use by students and faculty, the equipment's accessiblity by students must be maintained at its full potential. However, since computing equipment is complex and expensive, a trained operator is necessary to assist students and faculty in the operation of the equipment while maintaining the security of the lab.

FIVE-YEAR PLAN

College plans for instructional computing include both short-range and long-range goals.

A. Short-Range Goals

To provide modern computing capability for students and faculty. This goal can be achieved by accomplishing the 1980-81 instructional objectives and by receiving the requested resources for 1981-82. Realizing the short-range goal will establish an adequate base of computing capability to begin pursuit of the long-range goal.

B. Long-Range Goals

To provide interactive access to computers for students and faculty through a telecommunications network which includes all three campuses and Central Administration.

DIVISION OF ADP RECOMMENDATION:

The Division is not recommending Objective C ($20,000 C/O). Further evaluation must be conducted and provided to justify the level of expenditure.

Objective E, (1.0 FTE, $10,037) is not recommended. To our knowledge, the size and level of activity does not require a full FTE.

All other items are recommended as requested.

ADP BUDGET ANALYSIS INSTITUTION COMM. COLL. OF DENVER NUMBER 270730 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD.	$
PERSONAL SERVICES	20.90	339,240	23.20	441,726	27.40	503,470	26.40	492,348	26.40	492,348
OPERATING EXPENSE		37,511		25,921		32,709		28,209		28,209
OPERATING EXPENSE OTHER		30,609		24,543		43,432		37,654		37,654
EQUIPMENT -										
EQUIPMENT RENTAL		96,675		142,987		160,037		155,285		155,285
EQUIPMENT C/O						87,000		49,000		49,000
EQUIPMENT SUB-TOTAL		96,675		142,987		247,037		204,285		204,285
TOTAL	20.90	504,035	23.20	635,177	27.40	826,648	26.40	762,496	26.40	762,496
GENERAL FUND	20.20	465,127	22.30	564,983	26.50	799,339	25.50	735,187		
CASH										
FEDERAL										
SALARY ACT		19,278		45,134						
OTHER	0.70	19,630	0.90	25,060	0.90	27,309	0.90	27,309		

ADP BUDGET ANALYSIS INSTITUTION FORT LEWIS COLLEGE NUMBER 270510 SCHEDULE 2

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $	1981-82 FTE/ADV.BOARD	1981-82 $
PERSONAL SERVICES	7.00	124,690	7.00	141,559	8.00	165,969	8.00	165,969	8.00	165,969
OPERATING EXPENSE		7,785		14,405		17,087		17,087		17,087
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		30,457		29,400		28,067		28,067		28,067
EQUIPMENT C/O		59,973		60,000		90,000		60,000		60,000
EQUIPMENT SUB-TOTAL		90,430		89,400		118,067		88,067		88,067
TOTAL	7.00	222,905	7.00	245,364	8.00	301,123	8.00	271,123	8.00	271,123
GENERAL FUND	7.00	217,832	7.00	231,739	8.00	301,123	8.00	271,123		
CASH										
FEDERAL										
SALARY ACT		5,075		13,625						
OTHER		-2								

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

Computer Center Appropriation FY 1980-81		$245,364
Increases for FY 1981-82		
o Annualization of Classified Salaries	$ 1,763	
o New Systems Analyst Classified position 1.0 FTE	20,676	
o Hourly and Seasonal Changes	1,000	
o Increase in dial-up capabilities for data transmission	1,820	
o Increase for travel	500	
o Increase for Equipment	30,000	
Total Increases		$ 55,759
Computer Center Budget Request FY 81-82		$ 55,759
		$301,123

Based on the assumption that the college will have to bring the PDP 11/70 computer system up to maximum configuration, the following equipment will be needed:

4 telephone lines for data communications,
1 disk drive, and
1 16 line multiplexor for terminals.

The 1.0 FTE Systems Analyst will be used to increase the support for Academic and Administrative functions in systems design, data entry efficiency and overall computer usage.

Additional travel monies are requested for computer center employee training on the new computer hardware and software.

COMMENTS/RECOMMENDATIONS:

PERSONAL SERVICES:
The Division of ADP supports 1.0 FTE Systems Analyst contingent on the continued support for common shared systems/applications implementation among the four year colleges as applicable; and for the implementation of Academic systems/applications in support of the instructional activities as required.

OPERATING EXPENSE:
The Division of ADP supports the requested amount as submitted.

EQUIPMENT RENTAL:
The Division of ADP supports the requested amount as submitted.

EQUIPMENT CAPITAL OUTLAY:
The Division of ADP is cognizant of the tremendous increase in computer usage by both the Academic and Administrative users. However, the Division of ADP can not support the increase for equipment of $30,000, until Computer Utilization statistics for instructional, administrative and other users by time and jobs, within shifts, response times, turn-around times, costs, CPU/Channel utilization statistics by hour and day matrix; and an institutional ADP/Computing plan delineating the current and future informational needs which require computing support in enough detail to justify the increase ADP/Computing equipment, are provided.

ADP BUDGET ANALYSIS INSTITUTION LAMAR COMM. COLLEGE NUMBER 270745 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	1.70	24,354	1.70	26,425	2.00	35,746	2.00	35,746	2.00	35,746
OPERATING EXPENSE		875		2,343		2,728		2,728		2,728
OPERATING EXPENSE OTHER		8,586		12,198		12,585		12,585		12,585
EQUIPMENT - EQUIPMENT RENTAL		4,034		12,977		13,885		13,885		13,885
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		4,034		12,977		13,885		13,885		13,885
TOTAL	1.70	38,249	1.70	53,943	2.00	64,944	2.00	64,944	2.00	64,944
GENERAL FUND	1.70	35,265	1.70	52,805	2.00	64,944	2.00	64,944		
CASH										
FEDERAL		1,687		1,138						
SALARY ACT		-2,903								
OTHER										

Accomplishments:

A PDP 11/34 Computer is currently installed at Otero Junior College in La Junta with a dedicated telephone line to Lamar Community College. Lamar is currently using five interactive terminals. These terminals are lined to Otero through a pair of ComData multiplexers on loan from Otero Junior College. They allow Lamar Community College to maintain the necessary communications link between the two cities over the dedicated telephone line. The following advantages are being realized:

(1) Sharing of common software programs applicable to both schools.

(2) Reduced computer down-time as a result of better communication lines.

(3) On-line computer access eliminating coding and key punch processes and improving response time.

(4) Lower maintenance costs.

(5) Greater accessibility to computer access as a result of terminals directly in the users office and lower processing costs.

REQUEST YEAR OBJECTIVES:

Objective: Retention of competent staff, maintain a constant level of data processing support, and provide for professional levels of competence in the staff by providing travel to ADP meetings, professional seminars and to the central computer site.

Request: An increase of $4,956 which represents a 9% increase in all areas line 57 exempt classified staff. The 7% is based upon budget guidelines and does not provide for the objectives as listed above.

Justification: Budget guidelines of 7% only which does not meet the staffing, hard or software needs of the institution.

DIVISION OF ADP RECOMMENDATION:
As requested

ADP BUDGET ANALYSIS INSTITUTION MESA COLLEGE NUMBER 270625 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	6.40	119,915	7.00	142,942	7.80	157,072	7.80	157,072	7.80	157,072
OPERATING EXPENSE		44,294		29,233		32,901		20,000		20,000
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		37,150		25,000		28,000		26,750		26,750
EQUIPMENT C/O		60,000		60,000		82,600		60,000		60,000
EQUIPMENT SUB-TOTAL		97,150		85,000		110,600		86,750		86,750
TOTAL	6.40	261,359	7.00	257,175	7.80	300,573	7.80	263,822	7.80	263,822
GENERAL FUND	6.40	259,648	7.00	244,141	7.80	300,573	7.80	263,822		
CASH										
FEDERAL										
SALARY ACT		1,715		13,034						
OTHER		-4								

REQUEST YEAR OBJECTIVE

A. Objective: To maintain the current funding level in areas eroded by fixed cost increases.

Request:

0.0 FTE Exempt	$ 68
0.0 FTE Classified	1,749
Mtce. on Purchased Equip.	1,750
Supplies & Expenses	1,432
	$ 4,999

Justification: In order to continue to meet existing need levels, additional funding must be provided to accommodate increases in annualization of PERA rate increases and classified anniversary increases. A 6.1% inflationary increase for equipment maintenance and supplies and expenses is also included in the 7% budget.

B. Objective: To increase the compensation for the Director at the rate of 6.3%

Request: 0.0 FTE Exempt $ 1,844

Justification: Maintaining the purchasing power of college staff is a high priority in order that experienced, high quality personnel be retained and afforded some degree of equity in the face of spiraling cost of living increases.

FULL NEED BUDGET REQUEST

C. Objective: To increase the compensation for the Director at the rate of 5.7%. (Total request is for a 12% increase).

Request: 0.0 FTE Exempt $ 1,694

Justification: The full request of 12% more closely reflects the amount needed to maintain some degree of equity and competitiveness in staff salaries at Mesa College.

D. Objective: To provide secretarial services to the Computer Center staff.

Request: .8 FTE Classified $ 8,775

Justification: The college computer center supports all aspects of the college, and it is essential that the center be able to correspond and react to the needs of the various departments. Without a secretarial position, the ability of the center is hindered in many ways. Programmers, operators and the Director are performing clerical tasks not pertinent to their normally assigned responsibilities. The establishing of the position and the reallocation of the workload will allow a 15-20% increase in productivity within the department.

E. Objective: To maintain current level of effectiveness for supplies and expenses and travel.

Request:		
	Mtce. on Purchased Equip.	$ 1,250
	Supplies & Expenses	1,836
	Travel	400
		$ 3,486

Justification: Inflationary increases have impacted the above items in a substantial way. The amounts for supplies and expense and maintenance brings the requested increase to 12%.

Travel budgets have been seriously eroded due to mileage increases (14¢ to 20¢), lodging and meal increases, and increases in public transportation charges.

COMMENTS/RECOMMENDATIONS:

PERSONAL SERVICES:
The Division of ADP supports the 0.80 FTE secretarial/clerical increase as requested.

OPERATING EXPENSE:
Due to the increase in Interactive Computing and resultant reduction in supplies and expenses, their amount is reduced by $12,901 to $20,000.

EQUIPMENT RENTAL:
The amount of $26,750 is supported and reflects a 7% increase for inflation.

EQUIPMENT CAPITAL OUTLAY:
The Division of ADP is cognizant of the tremendous increase in computer usage by both the Academic and Administrative users. However, the Division of ADP can not support the increase for equipment of $22,000, until Computer Utilization statistics for instructional, administrative and other users by time and jobs, within shifts, response times, turn-around times, costs, CPU/Channel utilization statistics by hour and day matrix; and an institutional ADP/Computing plan delineating the current and future informational needs which require computing support in enough detail to justify the increase ADP/Computing equipment, are provided.

ADP BUDGET ANALYSIS INSTITUTION METROPOLITAN STATE COLLEGE NUMBER 270630 SCHEDULE 2

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $	1981-82 FTE/ADV.BOARD	1981-82 $
PERSONAL SERVICES	14.20	260,601	15.00	312,295	20.00	420,323	16.00	338,115	16.00	333,115
OPERATING EXPENSE		34,329		28,383		32,037		25,430		25,430
OPERATING EXPENSE OTHER		11,660		12,900		15,000		12,900		12,900
EQUIPMENT -										
EQUIPMENT RENTAL		106,892		114,741		125,932		117,694		117,694
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		106,892		114,741		125,932		117,694		117,694
TOTAL	14.20	413,482	15.00	468,319	20.00	593,292	16.00	494,139	16.00	494,139
GENERAL FUND	14.20	402,884	14.20	424,234	19.20	577,177	15.20	478,024		
CASH										
FEDERAL										
SALARY ACT		13,346		29,080						
OTHER		-2,748	0.80	15,005	0.80	16,115	0.80	16,115		

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

The primary objective of Computer Services is to build an efficient data processing organization at Metropolitan State College. The primary constraint which limits our capability to meet this objective is that since 1974-75, the number of FTE positions appropriated to Computer Services has increased by only 0.4 FTE while the workload has doubled. MSC has established internal FTE Manning Standards for Computer Services. These standards, when applied to the current workload in Computer Services, generate a staffing level of 22.2 FTE. This staffing level is comparable with other institutions of similar size, complexity and workload demands.

MSC's current systems, except the on-line registration and Admissions and Records systems, are designed using Punch Card Accounting Machine Logic, which requires excessive effort to maintain, and does not take advantage of current computer technology. A study by Touche Ross and Company dated November 1977, supports the above statement and recommends a long-range plan for updating or redesigning current systems.

SEVEN PERCENT BUDGET

The understaffing of Computer Services has reached such a level of seriousness that funds within the restricted Seven Percent Budget have been designed to meet this need. This request reflects only those needs on which the institution places highest priority.

Objective:
To provide adequate staffing of Computer Services for maintaining the security and integrity of software essential for operating a Data Base Management System shared by UCD and MSC.

Request:

1 FTE Classified Cost $25,820

Justification:
Currently, Computer Services has one person responsible for the security, integrity, and auditability of Student Records on data base files processed by the General Government Computer Center using the Data Base Management Systems, ADABAS, a commerical software package. Any absences by this one individual creates an extremely high risk, as problems may arise without the technical expertise to solve them. For this position, .5 FTE will fill the void of having only one person to assure the integrity, security and auditability of MSC and UCD student records. Also, .5 FTE would be responsible for quality control of documentation standards, monitoring daily operational functions and liaison on the twelve software packages used at the General Government Computer Center with which we must interface.

FULL REQUEST BUDGET

The Full Request Budget reflects the budget request level as approved by the Higher Education Computing Advisory Board, and not the total institution need as stated earlier. The following new positions are requested for Computer Services in addition to those positions requested in the Seven Percent Budget.

Objective:
To provide adequate staffing of Computer Services to begin development of those systems which are the most urgently needed:

Request:

2 FTE Classified Cost $38,068

Justification:
One (1) Systems Analyst and one (1) Programmer would be responsible for redesigning or replacing the Accounts Receivable/ Student Billing, Accounts Payable, State Accounting and Reporting Subsystems and General Ledger.

Objective:
To provide adequate staffing of Computer Services to begin development of those systems which are next in priority.

Request:

2 FTE Classified

Justification.
Two (2) Programmers are required to be responsible for Veterans, Financial Aid, Budget Reporting Systems and Property Control Systems to include revisions, updating and/or changing the system to meet user requirements.

COMMENTS/RECOMMENDATIONS:

PERSONAL SERVICES:	
1.0 FTE Systems Analyst is recommended to provide Systems Analysis and programming support in the development and implementation of the State Personnel System.	$22,000
OPERATING EXPENSE:	
This item reflects a decrease in Travel and Supplies and expenses from the 1980-81 estimate.	($ 2,953)
EQUIPMENT RENTAL:	
This item reflects an increase of 2.57% from the 1980-81 estimate.	$ 2,953
Total Increase	$25,820

The recommended budget represents an increase of 5.51 percent, well within the 7 percent guidelines.

ADP BUDGET ANALYSIS INSTITUTION OTERO JUNIOR COLLEGE NUMBER 270765 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	3.00	64,081	3.50	76,316	3.50	82,051	3.50	79,629	3.50	79,629
OPERATING EXPENSE		2,493		5,206		6,577		6,577		6,577
OPERATING EXPENSE OTHER		4,580		2,750		4,250		4,250		4,250
EQUIPMENT -										
EQUIPMENT RENTAL		34,573		39,224		40,410		40,410		40,410
EQUIPMENT C/O				8,000		8,000		8,000		8,000
EQUIPMENT SUB-TOTAL		34,573		47,224		48,410		48,410		48,410
TOTAL	3.00	105,727	3.50	131,496	3.50	141,288	3.50	139,066	3.50	139,066
GENERAL FUND	3.00	102,555	3.50	126,594	3.50	141,288	3.50	139,066		
CASH										
FEDERAL										
SALARY ACT		3,132		4,902						
OTHER										

ESTIMATE YEAR

a. Continue upgrading system and program documentation.
b. Keep operating system up-to-date.
c. Continue software license on current software.
d. Share software and expertise with other colleges with similar computers.
e. Work with deans and directors in institutional research.
f. Investigate methods of improving computing services and equipment for educational and administrative users.
g. Staff training
h. Improve existing systems.

REQUEST YEAR OBJECTIVES AND JUSTIFICATIONS:

1. Electronic Data Processing Equipment (Line 20 of Format 454)

   1979-80 year included purchase of RP04 disk drive and IAI communication equipment purchased by vacancy savings in personnel costs. Actual cost will reduce in 1980-81. (See program description).

2. Data Transmission (Line 21 of Format 454)

   Due to the implementation of IAI in July, 1980, these costs will soar for the year 1980-81, and continue for succeeding years. Once again, the 7% limitation does not allow us to include in our budget request. Detailed below are the actual costs involved in data communication areas for 1980-81. It is hoped that the State will include these costs as we implemented this accounting package at the request of the State, and as can be seen by the costs, it would greatly impact our on-going existing costs.

On-going dial-up communication (this cost shown on budget detail).....			$ 750.00
IAI Implementation			
Modem change	$ 44.00 x 12 months	=	528.00
Mountain Bell line change:			
OJC to Pueblo	$228.00 x 12 months	=	$3,216.00
Pueblo to Denver	$ 71.00 x 12 months	=	852.00
Actual amount required to meet costs			$5,346.00

3. Maintenance on Purchased Equipment (Line 25 of Format 454)

In 1979-80 Otero Junior College spent only $480 as Lamar was appropriated the money to cover maintenance costs which amounted to a total of $13,656. The monies have since been placed in Otero's budget for this year (1980-81). With the equipment added during the past year, this will bring the yearly maintenance costs to $15,900. It is essential to have this maintenance due to the sharing of two schools and usage the equipment gets.

4. Other Contracts (Line 20 of format 454)

Several software licenses were purchased in 1979-80 to provide for the implementation of the IAI Accounting System. The costs will reduce in 1980-81 as all that is required is the renewal of existing licenses. In 1981-82 it will be necessary to purchase new software to keep the educational and administrative users current with industry demands and technology. Therefore, we are requesting $4,250.00 to provide the service requested and required of us.

5. Travel: (Line 32 of Format 454)

Industry and technology have proven that it is essential to provide training for staff because today's technology becomes obsolete in only four years. Therefore, it is extremely important to keep staff up to date. Education and computers which are not kept modern, share the same fate of all organic beings. $2,500.00 will only provide a start. To provide the quality-type training we should be obtaining, costs would be two or three times higher.

6. Supplies and Expense (Line 33 of format 454)

With the increased costs of supplies and the increased use of computing services, we will need $4,079.00 to meet the demand of our users.

Note: Budget detail was provided to limit increase to 7%. However, we have assumed costs this year that should have been placed in our base (i.e., Data Transmission - see Item 2 of Request Year Objectives and Justification). In order to implement the IAI Accounting package mandated by the State Board of Community Colleges and the Legislature. It is essential that the costs of data transmission be placed in our base to establish an on-going cost; otherwise, the computer center will face a devastating blow to its existing base.

Please note description of computing equipment needs under Program Description. An additional $45,000.00 is needed to meet just the current needs in data processing equipment. An increase of $85,999.00 would allow the center to replace its current system with a faster and more efficient computer that would benefit both colleges and provide the computing power required for several years to come. both the educational and administrative computing.

DIVISION OF ADP RECOMMENDATION:
As requested

ADP BUDGET ANALYSIS INSTITUTION PIKES PEAK COMM. COLLEGE NUMBER 270740 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	9.80	184,664	11.50	246,693	12.00	263,549	12.00	254,281	12.00	254,281
OPERATING EXPENSE		12,533		10,514		13,043		13,043		13,043
OPERATING EXPENSE OTHER						4,720				
EQUIPMENT -										
EQUIPMENT RENTAL		82,843		71,410		93,340		84,837		84,837
EQUIPMENT C/O				14,704		14,704		14,704		14,704
EQUIPMENT SUB-TOTAL		82,843		86,114		108,044		99,541		99,541
TOTAL	9.80	280,240	11.50	343,321	12.00	389,356	12.00	366,865	12.00	366,865
GENERAL FUND	9.00	246,011	10.00	290,551	10.00	355,546	10.00	333,055		
CASH										
FEDERAL	0.80	25,079	1.50	29,531	2.00	33,810	2.00	33,810		
SALARY ACT		12,238		23,239						
OTHER		-3,088								

PROGRAM ACCOMPLISHMENTS

1. Actual Year (1979-1980). The on-line development of the registration/tuition accounting system was completed for implementation Fall quarter 1980-81.

   The on-line processes for Financial Aid were completed and used for most of the year. This has reduced the amount of paperwork considerably. It has also reduced the workload in the data creation center.

   Preliminary work was done in the development of an on-line circulation system for the Learning Resource Center. This is expected to be implemented during Fiscal Year 81-82.

   A new computer and new operating system was installed which allowed the Computer Center to provide the needed service to the administration offices and instructional programs without increased personnel.

2. Estimate Year (1980-81). The complete student on-line processing system was implemented for Fall quarter. This included Admissions, Registration, Accounting, and Financial Aid.

   Further development will be done on the on-line circulation process for the Learning Resource Center, and new processes will be developed for counseling, advising, and testing.

   It is anticipated that these processes will provide a significant reduction in manhours expended and in cost of supplies in various offices. It will also provide needed information on a timely basis.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

1. Personnel

   Objective: To provide the necessary personnel to maintain acceptable services for the administrative and instructional users of the Computer Center.

   Request: PPCC requests 10.0 FTE at a cost of $220,471.

Justification: The personnel are needed to maintain acceptable services to the users of the Computer Center and to develop new processes needed by the users. Current processes provide a cost avoidance in excess of $400,000 for the user offices. This cost avoidance represents the FTE that would be needed in the user offices if computer processing were not available. It is anticipated that the development of new processes will reduce the requirement for additional personnel in the future.

2. Hardware and Other Operating Expense

Objective: To rent, lease, purchase and maintain the hardware, software, and supplies required to continue computer support services for the users of the Computer Center.

Request: PPCC request $111,060 for hardware, software, and operating expenses.

Justification: The Computer Center is providing computing services to all administrative offices and instructional areas of the college. The use of the computer provides the user offices with timely processing and reports.

Based on statistics provided by the office of the registrar, it would take in excess of 35,000 hours annually to manually prepare the reports that are generated on the computer. Only 2,200 hours are required to prepare the computer input to generate these reports. To prepare the reports manually would require an additional 17.0 FTE in the office of the registrar.

Statistics from the accounting office indicate that it would require 29,316 hours to manually prepare accounting reports compared with only 300 hours to prepare the computer input to generate the reports on the computer. To prepare these reports manually would require an additional 14.0 FTE in the accounting office.

Other users of the Computer Center experience similar reductions in manual processing as a result of computer applications. This includes the Financial Aid office. Admissions office, Payroll office, and Personnel office.

Utilization of the on-line processes will further reduce the time required for the user to input data. It is also anticipated that the on-line process will provide a significant reduction in the cost of paper and forms in the user offices.

Hardware and Other Operating Expense

COSTS - CONTINUING

Ongoing Expense:

Hardware	$80,140
Software	4,720
Other Expense	11,500
Travel	1,500
TOTAL	$97,860

New Expense:

1 3350 Disk Drive	$13,200

The disk drive is needed to provide the additional storage space needed for software and data files. We are presently out of file space to add needed data files and software.

Ongoing Capital Outlay

This request is for a continuation of payments on a mini computer and key punch equipment. The key punch machines installed at PPCC obtained maximum rental accruals and were purchased effective July 1, 1979.

Hardware - DEC 11/34	$10,000
Hardware - Key Punches	4,704

REQUEST YEAR OBJECTIVES AND JUSTIFICATIONS:
The 7% limitation budget request is based upon the following budget assumptions, as indicated in the Budget Overview.

No change in enrollment - enrollment continues at the 1980-81 appropriated level of 4,200 FTE. A 7% limitation budget will not accommodate the anticipated growth to 5,000 FTE without eliminating salary increases, or imposing an unrealistic student/faculty ratio.

Following institutional priorities, the requested increases in the 7% limitation budget for Computing Support Programs are as follows (in priority order):

1. Other Operating Expense (9.0% Inflation	$ 7,373
2. Pera Increase @ .26% for all stafff	3,309
3. ADP - Other Current Expense (over the 9% Inflation)	7,073
Total Increases	$17,755

DIVISION OF ADP RECOMMENDATION:
As requested.

ADP BUDGET ANALYSIS INSTITUTION PUEBLO VOCATIONAL COMMUNITY COLLEGE NUMBER 270780 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	0.60	7,330	0.60	13,001	1.70	26,345	1.70	26,345	1.70	26,345
OPERATING EXPENSE		2,718		251		10,421		4,611		4,611
OPERATING EXPENSE OTHER		3,045		2,797		1,074		1,074		1,074
EQUIPMENT -										
EQUIPMENT RENTAL		4,104		4,104		11,714		9,514		9,514
EQUIPMENT C/O		8,450		8,327		12,224		21,641		21,641
EQUIPMENT SUB-TOTAL		12,554		12,431		23,938		31,155		31,155
TOTAL	0.60	25,647	0.60	28,480	1.70	61,778	1.70	63,185	1.70	63,185
GENERAL FUND	0.60	26,596	0.60	28,397	1.70	61,778	1.70	63,185		
CASH										
FEDERAL										
SALARY ACT				83						
OTHER		-949								

PROGRAM DESCRIPTION

The data processing request is designed to provide administrative support for financial, personnel, and student record keeping. In 1980-81 emphasis will be to complete conversion of the student record system. The 1980-81, PVCC will prepare to implement the Information Associates Inc. (IAI) Accounting System as used by other State supported community colleges. The 1981-82 full budget request is a must for starting the IAI system on July 1, 1980.

ACCOMPLISHMENTS

Actual:
All services were provided by the University of Southern Colorado. Some progress on conversion of the student record system was made.

Estimate:
Complete conversion of the student record system from U.S.C. to the Series/1.

Plan for implementation of the IAI Accounting System in 1981-82.

REQUEST YEAR

Objective: Install the IAI Accounting System and establish communication access to the General Government Computer Center (GGCC) located in Denver.

Request:

Add communication adapters to Series/I	$ 1,500.00
Add dial-up communication cost & modems	7,200.00
Add 64 meg disk drive	4,083.00
TOTAL	$12,783.00

Justification: Since all software for the IAI Accounting System is maintained and installed at GGCC, implementation of the system will not be possible without this equipment.

Objective: Hire a full-time Manager/Programmer to manage the Series/I and write computer programs as required for administrative support.

Request: .8 FTE Manager/Programmer----------$20,610.00

Justification: Only part-time help has been available, with very slow progress, towards the objective of establishing a student record and financial accounting system. Full utilization and efficiency of the computer cannot be realized without a full-time programmer.

DIVISION OF ADP RECOMMENDATIONS:
In coordination with the institution, the Division is recommending that the current computing equipment be replaced with equipment which is compatible with all other community colleges. This is the only means by which this college can reap the benefits of applications developed by other institutions. Current equipment is not compatible and requires reprogramming of every application for which staff does not now exist and is not appropriate to acquire.

The Division is recommending the $7,200 telecommunications costs to install the Higher Education Financial Accounting System which is centrally housed at General Government Computer Center in Denver, under central program control of the Community College Sector and the Division of ADP.

$5,583 of the equipment in the C/O request would not be recommended as requested. Instead the Division is recommending $15,000 in addition to the request for acquisition of replacement equipment under a 6 year pay plan.

The current equipment is under a time payment plan and the amount of $6,641 must be paid July 1, 1981.

ADP BUDGET ANALYSIS INSTITUTION TRINIDAD STATE JR. COLLEGE NUMBER 270775 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	4.70	74,335	4.10	74,390	4.10	81,449	4.10	78,838	4.10	78,838
OPERATING EXPENSE		6,034		8,702		9,431		9,431		9,431
OPERATING EXPENSE OTHER				2,199		2,375		2,375		2,375
EQUIPMENT -										
EQUIPMENT RENTAL		32,725		46,691		48,428		48,428		48,428
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		32,725		46,691		48,428		48,428		48,428
TOTAL	4.70	113,094	4.10	131,982	4.10	141,683	4.10	139,072	4.10	139,072
GENERAL FUND	4.70	111,275	4.10	129,042	4.10	141,683	4.10	139,072		
CASH										
FEDERAL										
SALARY ACT		2,309		2,940						
OTHER		-490								

REQUEST YEAR OBJECTIVES AND JUSTIFICATIONS:

Objectives - General

Objectives of the Computing Support Sub Programs are to provide twelve hours per day operational time and personnel for use of computer time and equipment to support instructors and students. Daytime hours are prime instructional hours; evening hours are used for administrative work. Expansion and improvement of informational and reporting systems will be of benefit to the staff, college and state and to better accountability, management and reporting will result. Remote terminals for student records systems and financial records will be available.

Objective: Professional Compensation Increases totalling 15% for the purpose of maintaining quality staff. A 9% increase is reflected in the 7% request and full 15% is requested in the Full funded request.

Request - Priority #1	7% Request	Full Funded Request
Salaries & Benefits	3,921	6,532

Justification: In keeping with the State Board for Community Colleges and Occupational Education and instructional priorities, exempt staff compensation increases have been defined as the first priority in order to maintain purchasing power of the administrative staff due to losses caused by inflation and to keep pace with similar positions. Funding at this level also continues the equity between administration and faculty.

Objective: Support salary increase averaging 1.7% as an offset to underfunding of central pots.

Request - Priority #4	7% Request	Full Funded Request
Salaries & Benefits	527	527

Justification: Most increases are requested at an estimated 1.7% as required to be provided and to offset prior period underfunding of the central pots. Hourly wages are increased by a similar amount.

Objective: Other current expense increases of 8% to offset expected price increases.

Request - Priority #4	7% Request	Full Funded Request
Other Current Expenses	2,546	2,546

Justification: Inflation will cause an estimated net reduction of 8.0% above the current level reducing the ability of the institution to provide sufficient current supplies and services. The institution has little control over phone, postage, and other costs which must increase due to reduced travel funds and anticipated rate increases.

Objective: Travel increase of 12% to offset expected increased cost.

Request - Priority #4	7% Request	Full Funded Request
Travel	96	96

Justification: Travel costs are estimated at a 12.0% increase due to the increased cost of gasoline and the fact that per diem rates have increased several times over the past several years with no corresponding increases in appropriation. Travel has been reduced to a minimum, but limited travel is still required to provide services to students and staff.

	7% Request	Full Funded Request
TOTAL REQUESTED INCREASE	7,090	9,701

DIVISION OF ADP RECOMMENDATION:
As requested

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLORADO BOULDER - COMPUTING CENTER NUMBER 270210 SCHEDULE A

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	36.70	791,554	47.00	1,178,765	47.00	1,184,450	47.00	1,183,173	47.00	1,183,173
OPERATING EXPENSE		341,398		256,549		249,351		268,096		268,096
OPERATING EXPENSE OTHER		162,320		185,265		236,858		198,845		198,845
EQUIPMENT -										
EQUIPMENT RENTAL		638,826		714,974		759,389		722,474		722,474
EQUIPMENT C/O		51,579		68,434		295,147		195,147		195,147
EQUIPMENT SUB-TOTAL		690,405		783,408		1,054,536		917,621		917,621
TOTAL	36.70	1,986,077	47.00	2,403,987	47.00	2,725,195	47.00	2,567,735	47.00	2,567,735

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

ESTIMATED 1980-81

- o Install the Cyber 172/720 system, replacing both CDC 6400 computers with a single machine of greater speed, capacity and reliability.
- o Acquire and install a time-sharing minicomputer system for direct classroom use, and acquire and develop hard and software to permit students and faculty to work with either the Cyber or mini equipment through any terminal.
- o Design a computing network on each campus, one which will link all four campuses, and which will optimize the use and flexibility of hardware and software, regardless of physical location.
- o Design a capability within the Center which will exploit the growing technology of micro-computing being used in industry, and develop the program plans to guide UCC growth into this area.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

"GOVERNOR's 7%" REQUEST

Objective #1

To meet increasing costs of supplies and expense, rental and maintenance of essential computer hardware and software.

Request

Format 454A	Line #	1980-81 Estimate	1981-82 Request	Increase (Decrease)
EAM Equipment	019	$ 4,979	$ 3,177	$ (1,802)
EDP Equipment	020	340,358	427,577	87,219
Data Transmission	021	79,177	53,528	(15,649)
Data Creation	022	40,504	42,315	1.811
Auxiliary Storage	023	3,260	-0-	(3,260)
Terminal Equipment	024	48,065	550	(47,515)
Maintenance	025	198,631	171,727	(26,904)
Other Contracts	029	32,635	46,215	13,580
Building Rental	030	91,880	91,880	-0-
Adm. Overhead	031	60,750	60,750	-0-
Travel	032	17,826	19,609	1,783
Supplies & Expense	033	238,723	250,270	11,547
Subtotal		1,156,788	1,177,598	20,810
Capital Outlay	050	68,434	170,147	101,713
TOTAL		$1,225,222	$1,347,745	$122,523

o FY 80-81: First installment payment minicomputer system ($68,434).

FY 81-82: Second installment payment minicomputer system ($170,147).

Justification; The requested funds are essential to continue the level of operation which will be in effect at the close of FY 80-81. The request is based on a line-by-line analysis of in-force maintenance contracts, trend analysis of actual costs, pending public utility rate increase requests, and vendor's preliminary estimates.

FULL REQUEST - ADDITIONAL ITEMS

Objective #2

To acquire 25 microcomputers and associated software and communications support which will form the basis of modernization of the University computing system.

Request:		
	Capital Outlay	$ 125,000
	Associated Operating Expense	68,000
		$ 193,000

Justification: The technological trend in business, engineering and industrial computing is the use of micro-mini-and large-scale computers in a complementary network system. The University lags behind other AAU institutions and industry in general in using this technology in preparation of students and in research. The acquisition of the Cyber 172/720 in FY 79-80, and of a large mini-computer for classroom support in 80-81 will lay the basis for upgrading the Computing Center. To support adequately the basic classroom major research institution, large numbers of microcomputers must be added to the equipment available to students and faculty, and all equipment must be linked through high-speed communications to insure optimal utilization. The equipment requested in FY 1981-82 will provide the first essential increment of new microcomputers and the basic communications devices to line the Cyber mainframe with the mini- and microcomputers on all University campuses.

DIVISION OF ADP RECOMMENDATIONS:
The Division is recommending that General Fund appropriations for purchase of computer time from the "Computing Center" be deleted from the "Colorado Springs and Denver" budgets.

The dollars should have been reported, in all cases, as cash income in the Boulder budget. Reconciliation of appropriations to Colorado Springs and Denver with actual use and reported or collected income in Boulder budget have been a constant problem.

The transition from estimated cash to General Fund in the Boulder budget should provide the University with more flexibility in administering computing resources among all General Fund users.

The University can reflect the value of consumption at Colorado Springs and Denver in the student cost calculation and extract them from the Boulder budget calculation.

The shift between current cash estimates and General Fund is recommended at $143,000.

The Division also requests that a cooperative effort be initiated between Colorado State University and the University of Colorado to study and propose a solution to current rules and regulations of HEW/Grant and contract and subsequent audit processes.

The level of this income at the University is estimated at $200,000 and current HEW rules and regulations dictate the management process of a 2.5 million dollar budget. (See Colorado State University).

The request for 25 microcomputers ($5,000 each) and associated operating expense ($2,720 each) is not recommended as requested. The Division of ADP recommends that 5 should be acquired to prove the value of microcomputing in the general support program of the University.

If this recommendation is funded, the University should prepare a special program plan and evaluation document before additional units and funding is requested.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLORADO BOULDER - ADMINISTRATIVE CENTER NUMBER 270210 SCHEDULE B

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	45.90	983,563	45.80	1,138,252	45.80	1,143,660	45.80	1,142,443	45.80	1,142,443
OPERATING EXPENSE		38,535		32,326		39,286		39,286		39,286
OPERATING EXPENSE OTHER		22,812		22,200		33,065		33,065		33,065
EQUIPMENT -										
EQUIPMENT RENTAL		486,590		557,967		602,257		602,257		602,257
EQUIPMENT C/O		25,588								
EQUIPMENT SUB-TOTAL		514,578		557,967		602,257		602,257		602,257
TOTAL	45.90	1,559,688	45.80	1,750,745	45.80	1,818,268	45.80	1,817,051	45.80	1,817,051

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

ESTIMATE 1980-81

Billing/Accounts Receivable System

Implementation of the new Billing/Accounts Receivable System will be completed for the Boulder and Denver Campuses in September 1980. It is anticipated that this system will improve collections and reduce the delays and frustrations associated with the existing system. Additional modifications will be made to the system prior to implementation at the University Health Sciences Center.

Payroll/Personnel
The implementation of the Payroll computation module is scheduled for completion in April 1981. These new programs will streamline the calculation process and improve the control and auditability of the entire payroll. Considerable improvements in the paper work flow associated with payroll is anticipated .

Long Range Planning
In July a project will be initiated to develop a new long range plan for administrative systems development and maintenance University wide. The project team will be made up of representatives from each campus Central Admistration, and Management Systems.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

"GOVERNOR'S 7% " REQUEST

Objective #1:
To meet ongoing cost of supplies and expenses and to continue rental and maintenance of previously appropriated hard and software.
The following table presents Objective #1 by Format 454B line item. The funds in the "request" column of the table are those necessary to continue current levels of operation.

Request:

Format 454B Line		1980-81 Estimate	1981-82 Request	Increase/ Decrease
EAM Equipment	(019)	$ 13,125	$ 17,586	$ 4,461
EDP Equipment	(020)	445,746	445,746	-0-
Data Creation	(022)	26,400	26,400	-0-
Auxiliary Stor	(023)	2,187	2,405	218
Terminal Equip	(024)	15,120	15,120	-0-
Maintenance	(025)	55,389	71,000	15,611
Software	(029)	22,200	33,065	10,865
Subtotal		$580,167	$611,322	$31,155
Travel	(032)	2,309	3,805	1,496
Supplies & Exp	(033)	26,017	31,481	5,464
Subtotal		$608,493	$646,608	$38,115
Capital Outlay		-0-	-0-	-0-
TOTAL		$608,493	$646,608	$38,115

Justification: The 1980-81 appropriation did not provide sufficient funds to accommodate inflationary increases for rental and maintenance. This has resulted in a shortage in the maintenance line item for Fiscal Year 1981-82. Additional increases in software expenses have occurred as a result of acquisition of special software from other state agencies and from increase in maintenance contracts from vendors. Increases in travel expenses are caused by extraordinary cost increases experienced nationwide in the last year. The request is for full-year funding necessary to support equipment and programs already approved and installed.

Objective #2

Rental

One (1) 3211 Type Printer (Line 020) $24,000

Justification: CACPC has two (2) 1,100 lines per minute printers. This is insufficient during critical periods to keep up with the output from the central processor. This failure results in delays in the delivery of reports to University offices. A new high speed printer will eliminate these delays.

No other programmatic increases are requested in 1981-82. Current support and compensation adjusted for inflation constitutes the remainder of the Data Processing request.

DIVISION OF ADP RECOMMENDATION:
The Division is not recommending the new printer under Objective #2. The University is requested to prepare a cost analysis and alternative review to printing requirements. Based on the quantity of on-line terminals printers and the possibility for the administrative users to obtain output from the new forms (xerox type) printer to be installed at the Academic Center, the Division has no basis to recommend a third printer.

All other items are recommended as requested.

ADP BUDGET ANALYSIS

INSTITUTION UNIV OF COLORADO BOULDER

NUMBER 270210 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	82.60	1,775,917	92.80	2,317,017	92.80	2,328,110	92.80	2,325,616	92.80	2,325,616
OPERATING EXPENSE		375,760		288,875		288,673		307,382		307,382
OPERATING EXPENSE OTHER		185,305		207,465		269,887		231,910		231,910
EQUIPMENT -										
EQUIPMENT RENTAL		1,127,416		1,272,941		1,361,646		1,324,731		1,324,731
EQUIPMENT C/O		77,567		68,434		295,147		195,147		195,147
EQUIPMENT SUB-TOTAL		1,204,983		1,341,375		1,656,793		1,519,878		1,519,878
TOTAL	82.60	3,545,565	92.80	4,154,732	92.80	4,543,463	92.80	4,384,786	92.80	4,384,786
GENERAL FUND	92.80	2,408,514	92.80	2,584,099	92.80	3,151,811	92.80	3,136,134		
CASH		1,660,119		1,350,000		1,391,652		1,248,652		
FEDERAL										
SALARY ACT				220,633						
OTHER	-10.20	-523,068								

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. COLO. SPRINGS - INSTRUCTION NUMBER 270240 SCHEDULE A

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	3.30	50,213	3.30	48,936	3.90	61,126	3.30	50,153	3.30	50,153
OPERATING EXPENSE		10,549		11,361		14,596		12,505		12,505
OPERATING EXPENSE OTHER		47,500		31,000		35,430				
EQUIPMENT -										
EQUIPMENT RENTAL		11,244		24,144		27,641		26,574		26,574
EQUIPMENT C/O		27,829		36,300		45,312		45,312		45,312
EQUIPMENT SUB-TOTAL		39,073		60,444		72,953		71,886		71,886
TOTAL	3.30	147,335	3.30	151,741	3.90	184,105	3.30	134,544	3.30	134,544

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

A. INSTRUCTIONAL DATA PROCESSING (ADP)

Limited facilities and services are available for all academic units and faculty/student research. A minicomputing system allows both remote job processing at the Boulder campus and local interactive computing.

Interactive computing (student terminal input/output) needs more terminals to reach the academic guidelines lower limit of one terminal per every 150 student FTE. Also, more support must be given to batch (remote job processing) for students and research. This is necessary because large research jobs cannot be run on the local minicomputer system.

Trends and issues for Instructional Data Processing are as follows:

- o Increased number of courses and students which rely upon computing services. Student headcount in Computer Science is approaching a 70 percent increase in 1980.
- o Increased costs for input/output supplies.
- o Continued pressure to provide more service such as keeping the facility open more hours, supplying program assistance and other technical consultation.
- o Demand for critical software support (both personnel and vendor purchased maintenance) for the UCCS Minicomputing System.
- o Space for interactive terminals. This is a critical problem. Costs to decentralize the terminal locations will grow if centralzied space is not obtained. The additional costs will be for communication devices and allied functions.

Actual Year 1979-80

- o Installed a minicomputing system to emulate the remote job entry devices for Boulder Computing Services. Also, began using the computer for limited interactive computing.
- o Served about 1,000 students during the academic year using the Boulder computer via the UCCS remote job entry terminals.

- Exceeded the UCCS budget for Boulder computer lease time by $47,500; thus making the annual cost $92,000.
- Served about 200 summer session students with the UCCS minicomputer after its installation. This amounted to about 2,400 terminal-connect hours.

Estimated Year 1980-81

- Tune minicomputer system to provide faster service for batch users who communicate with Boulder.
- Maintain open hours and services at the 1979-80 minimum level.
- Meet the increase of usage demand, by serving an estimated 1900 users and 22,800 terminal-connect hours, and an increase of 80 percent of time-share usage.
- Exceed the UCCS allocation of $31,000 for Boulder computer lease time by mid fall and will exceed a total of $60,000 for Boulder lease time for the fiscal year.

Objective #1: To meet new workload resulting from increased enrollment.

Request:	Increase Operating Expense		$ 5,040
	Increase Support Staff		3,852
		FTE	.2

Justification: An enrollment increase of 125 FTE students is requested for 1981-82. This request for additional support is the same level as provided in 1980-81 appropriation, adjusted for salary increases and inflation.

Objective #2: To improve the base for the ADP/IDP operations.

Request:	Increase IDP Capital Outlay (see Sec. 11)		
	Increase supply and expense		$ 2,175
	Increase support staff		23,225
		FTE	1.5

Justification: The supply and expense increase will permit serving the user with needed punch cards, printout paper, tape, ink, and other direct needs.

Staff position necessary to bring ADP/IDP to minimum-need level include the following:

Data Entry Operator	.5 FTE	$ 5,145
Programmer	1.0 FTE	$ 18,080
	1.5 FTE	$ 23,225

CAPITAL OUTLAY

Objective #1: To provide instructional equipment for 125 new FTE.

Request: Increase for enrollment . . . . . $ 7.326

Justification: It is already difficult to effectively instruct students with the current equipment. With 125 new FTE, additional equipment must be provided.

General Equipment	$ 5,818
IDP Equipment	$ 1,508

Objective #2: To improve the communication equipment for IDP operation.

Request: Increase IDP Capital Outlay. . . . . $ 4,600

Justification: The interface for computer to computer communication at UCCS is too slow and causes excessive backlog in the batch processing used for large research programs and special statistics programs. The Capital Outlay request will replace the communications interface and add communications processor.

DIVISION OF ADP RECOMMENDATION:

Capital Outlay recommendation is comprised of the following items:

o Third installment payment (6 year pay plan) on PDP-117-mini-computer	$ 26,000
o Last installment of add on PDP-1170 hardware acquires in FY 79-80	$ 10,300
o Additional communication hardware (one-time c/o)	$ 4,600
o Purchase of instructional software packages (one-time c/o)	$ 4,412
TOTAL	$ 45,312

The Divison is recommending that the "lease time" ($31,000 FY 80-81) expense reflected under "Other Operating Expense" be transferred to the General Fund budget of University of Colorado at Boulder. This recommendation should provide the University more flexibility in distribution of available computing resources. (See Boulder/Academic Center budget detail)

All other items under the 7% request are recommended.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. COLO. SPRINGS - ADMINISTRATION NUMBER 27024Q SCHEDULE B

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	2.50	45,039	2.70	49,880	3.80	65,984	2.70	49,880	2.70	49,880
OPERATING EXPENSE		13,451		13,795		16,431		15,172		15,172
OPERATING EXPENSE OTHER		56,000								
EQUIPMENT -										
EQUIPMENT RENTAL		31,595		35,126		40,102		36,386		36,386
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		31,595		35,126		40,102		36,386		36,386
TOTAL	2.50	146,085	2.70	98,801	3.80	122,517	2.70	101,438	2.70	101,438

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

A. ADMINISTRATIVE DATA PROCESSING (ADP)

Services provide development for special administrative needs, maintenance for existing programs and all interface with central processing at Boulder. These items include payroll, financial aid, admissions and records, registration systems, continuing education, veterans, library, and many other administrative units. In addition, ADP provides all data entry work for this campus and prepares all class cards and package for registration.

Trend and Issues for Administrative Data Processing are as follows:

- o Administration units are asking for more specialized programming development and special report systems. Data coordination is a critical problem - between local computing, Boulder computing and administrative units.
- o Remote printing is increasing due to workload being shifted from Boulder to UCCS. Printers are saturated with daily work.
- o The use of data processing paper and card supplies and special paper forms is increasing. Budgeted funds are not covering these costs.
- o Data entry workload is one of the most critical problems for ADP. Financial and payroll systems are 100 percent dependent upon getting their data into the Boulder system. There has been no increase in data entry personnel for the last two years.

B. ADMINISTRATIVE DATA PROCESSING (ADP)

Actual Year 1979-80

- o Finished development of several library systems.
- o Maintained data entry work at a tolerable level.
- o Developed and refined student financial aid programs.
- o Programmed and executed special budget requests, rather than initiating the programs from Boulder.

Estimated Year 1980-81

- o Develop a recording/reporting system for physical plant keys.
- o Develop a registration system that will be non-card oriented.
- o Improve data integrity betwen financial aid, finance and admissions.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

Total Computing Support Request. . . . . $ 261,310
FTE 7.7

Total Requested Increase . . . . . $ 47,068
FTE 1.7

TIER I - GOVERNOR'S 7 PERCENT REQUESTED INCREASE . . . . . $ 12,776

Request: Operating Expense. . . . . $ 12,776

Justification: Inflation is provided at approximately 10 percent of the 1980-81 supplies and expense cost.

TIER II - FULL REQUEST INCREASE. . . . . $ 34,292
FTE 1.7

DIVISION OF ADP RECOMMENDATION:
Equipment rental is recommended at $36,386. UCCS should convert all commercial telephone lines to State Telpak, with a reduction in cost for the same service.

All other items under the 7% request are recommended.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. COLO. SPRINGS NUMBER 270240 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	5.80	95,252	6.00	98,816	7.70	127,110	6.00	100,033	6.00	100,033
OPERATING EXPENSE		24,000		25,156		31,027		27,677		27,677
OPERATING EXPENSE OTHER		103,500		31,000		35,430				
EQUIPMENT -										
EQUIPMENT RENTAL		42,839		59,270		67,743		62,960		62,960
EQUIPMENT C/O		27,829		36,300		45,312		45,312		45,312
EQUIPMENT SUB-TOTAL		70,668		95,570		113,055		108,272		108,272
TOTAL	5.80	293,420	6.00	250,542	7.70	306,622	6.00	235,982	6.00	235,982
GENERAL FUND	6.00	287,240	6.00	240,101	7.70	306,622	6.00	235,982		
CASH										
FEDERAL										
SALARY ACT	-.20	6,180		10,360						
OTHER				61						

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. DENVER - INSTRUCTION NUMBER 270230 SCHEDULE A

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	3.90	47,617	4.00	56,482	4.50	68,312	4.20	65,956	4.20	65,956
OPERATING EXPENSE		22,236		14,510		15,410		15,160		15,160
OPERATING EXPENSE OTHER		83,721		40,000		52,000				
EQUIPMENT -										
EQUIPMENT RENTAL		23,433		34,287		45,673		41,273		41,273
EQUIPMENT C/O		3,000		46,277		49,277		49,277		49,277
EQUIPMENT SUB-TOTAL		26,433		80,564		94,950		90,550		90,550
TOTAL	3.90	180,007	4.00	191,556	4.50	230,672	4.20	171,666	4.20	171,666

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

INSTRUCTIONAL DATA PROCESSING

ESTIMATE YEAR
In 1980-81 Instructional Data Processing:

1. Merged two departments, UCD Computing Center and UCD Data Processing, into a single department, UCD Computing Services. This allowed more efficient utilization of personnel, equipment and space, thus increasing services to the students and administrative users.

2. Purchased a PRIME 550 minicomputer system with 1.5 megabytes of main memory, 300 megabytes of disk storage and other peripheral equipment. This system provides most of the undergraduate computing services for UCD. In particular, it provides reliable timeshare capabilities for the beginning naive user of the computer.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

A. GOVERNOR'S 7% BUDGET

1. Objective: To provide appropriate compensation for professional staff.

   Requested Increase:

   Professional Compensation $ 733

   Justification: Compensation for exempt professional staff should match the 9.2% increase requested for faculty.

2. Objective: To provide adequate supervision and planning.

   Requested Increase:

   Operating Expense $17,636

   Justification: These funds are needed to cover increased costs for supplies, maintenance, and to accommodate increased computer usage.

5. FULL YEAR BUDGET

1. Objective: To provide appropriate compensation for professional staff.

   Requested Increase:

   Professional Compensation $ 536

   Justification: Compensation for exempt professional staff should match the 3.3% increase requested for faculty.

2. Objective: To provide additional assistance to users.

   Requested Increase:

   0.25 FTE Hourly Support $ 1,820

   Justification: Hourly workstudy advisors would provide assistance to users and provide service during extended hours of operation.

3. Objective: To provide necessary supplies and services.

   Requested Increase:

   Operating Expenses $ 6,650

   Justification: Additional operating funds are required to support additional students and provide for increased costs of supplies and other operating expenses.

DIVISION OF ADP RECOMMENDATIONS:
The Division is recommending that the "lease time" ($40,000 FY 80/81) expense reflected under "Other Operating Expense" be transferred to the General Fund budget of University of Colorado at Boulder. This recommendation should provide the University more flexibility in distribution of available computing resources. (See Boulder/Academic Center budget detail)

All other items under the 7% request are recommended as requested.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. DENVER - ADMINISTRATION NUMBER 270230 SCHEDULE 6

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	3.60	55,854	3.50	60,095	3.80	70,105	3.50	60,828	3.50	60,828
OPERATING EXPENSE		4,326		21,003		22,653		21,633		21,633
OPERATING EXPENSE OTHER		26,708								
EQUIPMENT -										
EQUIPMENT RENTAL		50,008		38,062		46,998		37,318		37,318
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		50,008		38,062		46,998		37,318		37,318
TOTAL	3.60	138,896	3.50	119,160	3.80	139,756	3.50	119,779	3.50	119,779

GENERAL FUND
CASH
FEDERAL
SALARY ACT
OTHER

ESTIMATE YEAR

1. Merged two departments, UCD Computing Center and UCD Data Processing into a single department, UCD Computing Services. This allowed more efficient utilization of personnel, equipment and space, thus increasing services to the student and administrative user.

2. Acquired a PRIME 550 minicomputer in September 1980. Although the primary function of the minicomputer is for instructional computing, there are two administrative functions provided by the machine.

   a. On-line data entry, providing better and more timely edits on data input to the administrative systems, and
   b. Remote job entry which provides UCD users access to the University's large administrative computer in Boulder.

3. An on-line registration process for the UCD/Metropolitan State College common registration was installed Fall, 1980. This provides for increased cooperation between the Auraria institutions and increased choices for students of these institutions.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

A. GOVERNOR'S 7% REQUEST

1. Objective: To provide appropriate compensation for professional staff.

   Requested Increase:

   Professional Compensation $ 773

   Justification: Compensation for exempt professional staff should match the 9.2% increase for faculty.

2. Objective: To provide necessary supplies and services

   Requested Increase:

   Operating Expenses $ 7,886

Justification: This amount covers the increased cost of supplies, rentals, and maintenance and the additional supplies necessary to accommodate increased computer usage.

B. FULL REQUEST BUDGET

1. Objective: To provide compensation for professional staff.

Requested Increase:

Professional Compensation	$ 536

Justification: Compensation for exempt professional staff should match the 3.3% increase requested for faculty.

2. Objective: To provide adequate supervision and planning.

Requested Increase:

0.25 FTE Exempt Staff	$ 8,741

Justification: The directorship is now a half-time position (0.25 FTE in Instructional Data Processing and 0.25 FTE in Administrative Data Processing). A full time director is needed to provide adequate supervision and planning (0.25 FTE is also requested under Instructional Data Processing).

DIVISION OF ADP RECOMMENDATION:
The Division is not recommending the requested increase in Data Transmission, modems, and Public Utility line costs. Other alternatives should be pursued within current budget to accomplish increased need. (Equipment Rental Line).

All other requests are recommended as ongoing costs.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. DENVER NUMBER 270230 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	7.50	103,471	7.50	116,577	8.30	138,417	7.70	126,784	7.70	126,784
OPERATING EXPENSE		26,562		35,513		38,063		36,793		36,793
OPERATING EXPENSE OTHER		112,429		40,000		52,000				
EQUIPMENT -										
EQUIPMENT RENTAL		73,441		72,349		92,671		78,591		78,591
EQUIPMENT C/O		3,000		46,277		49,277		49,277		49,277
EQUIPMENT SUB-TOTAL		76,441		118,626		141,948		127,868		127,868
TOTAL	7.50	318,903	7.50	310,716	8.30	370,428	7.70	291,445	7.70	291,445
GENERAL FUND	7.50	305,703	7.50	299,398	8.30	370,428	7.70	291,445		
CASH										
FEDERAL										
SALARY ACT		6,208		11,318						
OTHER		6,992								

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. MED. CTR. - COMPUTER OPERATIONS NUMBER 270220 SCHEDULE A

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	43.00	942,500	47.00	1,043,404	50.50	1,116,514	47.00	1,043,404		
OPERATING EXPENSE		310,717		340,198		405,498		364,012		
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		440,465		533,938		900,196		592,713		
EQUIPMENT C/O										
EQUIPMENT SUB-TOTAL		440,465		533,938		900,196		592,713		
TOTAL	43.00	1,693,688	47.00	1,917,540	50.50	2,422,208	47.00	2,000,129		
GENERAL FUND	36.50	1,478,585	40.50	1,657,883	44.00	2,258,405	40.50	1,836,326		
CASH										
FEDERAL										
SALARY ACT		75,614		111,530						
OTHER	6.50	139,489	6.50	148,127	6.50	163,803	6.50	163,803		

ESTIMATE YEAR - 1980-81

- o Further distribution of the Data Entry function to the Employee Services Division. This Division will now be able to submit and edit its own input to the University-wide Payroll/Personnel System via key-to-disk entry terminal.
- o The phasing out of a stand-alone Remote Job Entry (RJE) station will be completed in September, 1980, and the RJE function transferred to an enhanced key-to-disk data entry configuration. This will result in the totally cardless data entry and data transfer system and will be realized at less than current cost.
- o The Data Entry Section will be reorganized from two-shift to one-shift operation. This will permit much closer administrative control over the capture of data, with no degeneration of throughput.
- o Complete recruitment and initial training of User Self-help Environment Coordinator and continue implementation of the USE concept.
- o Continue evaluation of data dictionary, data base, data communications, on-line applications software, teleprocessing driver and hardware products to be used within "FAST", the UCHSC Management Systems Facilities for Application.
- o Continue implementation of an automated Project Control System, a sister product to the Systems Development Methodology activated in 1979-80.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION

"GOVERNOR'S 7%" REQUEST

Objective #1: To provide funding for the maintenance of on-going base programs.

Request:

Operating Expense	$ 34,020
Machine Rental	53,394
Auxiliary Recharges	(1,634)
Reallocations Increase	(13,178)
TOTAL REQUESTED INCREASE	$ 72,602

Justification: This request represents a 10% increase to offset inflation related costs.

Objective #2: To provide additional technical staff and computer software and hardware to implement data processing oriented projects to better serve the Health Sciences Center.

Request:

1.0 FTE Staff Program Assistant	$ 14,718
0.5 FTE Systems Analyst A	10,355
1.0 FTE Systems Analyst B	22,844
1.0 FTE Sr. Systems Analyst	25,193
Operating Expense	25,280
Machine Rental	149,460
TOTAL REQUEST	$ 237,850

Justification: 1.0 FTE Staff Program Assistant is requested to provide full-time effort in implementing the comprehensive Security and Disaster Management program developed in 1979-80 in response to Legislative and Automated Data Processing concerns. This FTE will coordinate the physical security in the UCHSC computer system and the development of contingency plan for data processing hardware, software and data if a disaster should occur. The success of this program is dependent on the recognition of the need to secure the valuable resources of Data Processing. A Security and Disaster Management effort has been recommended to the Health Sciences Center by both the State Auditors and the Division of Automated Data Processing.

0.5 FTE Systems Analyst A is requested to assist in the USE (User Self-help Environment) program begun in 1980-81 with the hiring and training of a coordinator. This program is designed to provide direct, but controlled, interface between users and the administrative computing resource thereby reducing or eliminating the costly and time-consuming necessity for analytical programming and operational efforts spent in answering the short-term informational needs of the decision makers. By applying expert attention to introducing users of computer data directly to the computer resource, the USE concept will reduce user dissatisfaction and make information available within acceptable time-frame.

1.0 FTE Systems Analyst B is requested to implement the Facility for Application System Technics (FAST) concept. This concept emphasizes the establishment of a data base and related techniques which allow systems developers to design, program and implement longer-term applications for users in a shorter time period and with the assurance of data integrity.

1.0 Senior Systems Analyst is requested to function as the Data Base Administrator for the combined FAST/USE programs described above. The success of FAST/USE plans is dependent upon adequate structuring and control of the data being accessed by professional systems developers as well as by the users. The task of data base administration requires an organizational subgroup. at the administrative level, devoted to the custodianship of data bases. This requested FTE will be the starting point of the administrative providing the services of FAST and USE.

Without additional associated software (operating expense) and hardware (machine rental), the implementation of FAST/USE will be impossible, for without the tools, information cannot be generated. These tools consist primarily of systems software and support hardware to deliver information in a flexible manner easily used by programmers and users.

FULL REQUEST

Objective #3: To anticipate the need for increased central processor capacity, updated systems software capability and related peripheral device support.

Request:

Operating Expense	$ 6,000
Machine	163,404
Auxiliary Recharges	(864)
TOTAL REQUEST	$ 168,540

Justificaton: The rapid advancement of computer technology has resulted in the obsolescence of much computer hardware and educational materials before they are ever used. The expansion of the field necessitates the need for data-processors to constantly evaluate new software and hardware and their relationships to current system. This request represents an estimate of the costs to keep pace with the latest technologies and techniques available to meet the projected information needs.

DIVISION OF ADP RECOMMENDATION:
The Division recommendation is based on an on-going inflationary budget only.

Most of the objectives stated in the request should be accomplished within current staffing.

The equipment rental request $149,460 under Objective #2 and $163,404 under Objective #3 are not defined and therefore cannot be recommended by the Division.

Based on the knowledge that the installed computing equipment has been converted to a purchase plan, the University should coordinate new acquisitions in accordance with the payment schedule of current equipment. Full disclosure and coordination with the Division in this action would be helpful in submitting new requests.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. MED. CTR. - MANAGEMENT IMPROVEMENT NUMBER 270220 SCHEDULE B

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES					8.50	160,925				
OPERATING EXPENSE						121,975				
OPERATING EXPENSE OTHER						302,500				
EQUIPMENT -										
EQUIPMENT RENTAL										
EQUIPMENT C/O						1,903,484				
EQUIPMENT SUB-TOTAL						1,903,484				
TOTAL					8.50	2,488,884				
GENERAL FUND					8.50	2,488,884				
CASH										
FEDERAL										
SALARY ACT										
OTHER										

REQUEST YEAR OBJECTIVE AND JUSTIFICATION

The only 1981-82 request for State funding for Management Systems Improvement is for the Clinical Data Processing System.

Objective #1: To begin the installation of Phase II for the total Hospital Information System, Clinical Data Processing. The installation will be implemented over a 24-month period.

Request:

8.5 FTE Classified Staff	$ 160,925
Operating Expenses:	
Supplies	23,175
Software	98,800
System Installation	302,500
Hardware 1/	1,600,984
Terminal Installation 2/	302,500
TOTAL REQUEST	$ 2,488,884

1/ Purchase of 125 Video Matrix Terminals
2/ Includes costs associated with the purchase of cables, cable installation and core drilling of 125 terminals.

Justification: The Clinical Data Processing System (CDP) represents the second module of the planned Hospital Information System. The first module, the Patient Accounting System, has been installed and is in full operation as of October 1, 1978.

The 1981-82 request represents the costs for the first year of a two year developmental installation period for the system. The total developmental and installation costs will be approximately $4.6 million. A major portion of the request during the developmental/installation period is for one-time only costs associated with the purchase and installation of the hardware. Once the system is fully implemented, benefits will exceed costs.

DIVISION OF ADP RECOMMENDATION:
The Division is not submitting a recommendation for the Clinical Data Processing System due to the specialized nature of the application in patient care documentation.

Secondly, it is impossible for the Division of ADP in the short time of the budget process, to verify the stated cost benefits.

The medical center has not attempted to prepare the Division for this request during the last 24 months since the initial request was submitted in FY 1979-80.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF COLO. MED. CTR. NUMBER 270220 SCHEDULE 2

	1979-80 FTE/ACTUAL	1979-80 $	1980-81 FTE/ESTIMATE	1980-81 $	1981-82 FTE/REQUEST	1981-82 $	1981-82 FTE/RECOMMEND	1981-82 $	1981-82 FTE/ADV.BOARD	1981-82 $
PERSONAL SERVICES	43.00	942,506	47.00	1,043,404	59.00	1,277,439	47.00	1,043,404	47.00	1,043,404
OPERATING EXPENSE		310,717		340,198		527,473		364,012		364,012
OPERATING EXPENSE OTHER						302,500				
EQUIPMENT -										
EQUIPMENT RENTAL		440,465		533,938		900,196		592,713		592,713
EQUIPMENT C/O						1,903,484				
EQUIPMENT SUB-TOTAL		440,465		533,938		2,803,680		592,713		592,713
TOTAL	43.00	1,693,688	47.00	1,917,540	59.00	4,911,092	47.00	2,000,129	47.00	2,000,129
GENERAL FUND	36.50	1,478,585	40.50	1,657,883	52.50	4,747,289	40.50	1,836,326		
CASH										
FEDERAL										
SALARY ACT		75,614		111,530						
OTHER	6.50	139,489	6.50	148,127	6.50	163,803	6.50	163,803		

ADP BUDGET ANALYSIS INSTITUTION UNIV OF NORTHERN COLORADO NUMBER 270470 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	22.00	419,315	22.00	475,938	24.00	513,954	23.00	497,791	23.00	497,791
OPERATING EXPENSE		41,434		32,865		54,750		54,750		54,750
OPERATING EXPENSE OTHER		8,004		8,004		8,004		8,004		8,004
EQUIPMENT -										
EQUIPMENT RENTAL		119,702		111,956		127,222		127,222		127,222
EQUIPMENT C/O		73,979		94,468		87,683		87,683		87,683
EQUIPMENT SUB-TOTAL		193,681		206,424		214,905		214,905		214,905
TOTAL	22.00	662,434	22.00	723,231	24.00	791,613	23.00	775,450	23.00	775,450
GENERAL FUND	22.00	558,045	22.00	671,851	24.00	790,613	23.00	774,450		
CASH										
FEDERAL										
SALARY ACT		31,548		50,380						
OTHER		32,841		1,000		1,000		1,000		

PROGRAM ACCOMPLISHMENTS

A. Actual Year

1. Increased use of and support to Remote Job Entry terminals on the Holmes Campus for instructional and research purposes.
2. Implemented an on-line student registration process.
3. Implemented on-line data entry to aid the Housing Office in assignment and billing processes.
4. Implemented on-line data entry for Personnel, Payroll, and Academic Affairs for maintenance of the personnel data base.
5. Expanded usage of administrative terminals to provide faculty and staff with direct access to student records thus improving advising and scheduling services.
6. Installed a new accrual accounts receivable system.

B. Estimate Year

1. Implement a time sharing interactive system for student instructional and research use.
2. Revise the student loan system to provide more accurate and timely financial aids information.
3. Implement an on-line data entry system to support the administrative requirements of the Graduate School.
4. Implement a system to manage the prospective student file to enhance systematic information flow and follow-up to persons who express an interest in attending UNC.

REQUEST YEAR OBJECTIVES AND JUSTIFICATION:

A. Objective: To provide trouble-shooting and remedial maintenance services to support the distributed data entry, RJE station, and instructional terminals.

Request: $12,000 increase, 1.0 FTE (Line 4 of Format 454).

Justification: Over thirty remote terminals are now in place to increase the effectiveness and efficiency of instructional, research, student services, and administrative functions. To maintain the serviceability of the terminals, a full-time position is required.

B. Objective: To provide programming capabilities to support a University management system (RRPM) and other institutional management data.

Request: $15,000, 1.0 FTE (Line 3 of format 454)

Justification: The University has launched an annual program review and evaluation process. Most of the base data required for the process can only be obtained and accumulated by an ongoing computerized management system. Information provided by the system is especially valuable in determining the proper allocation of academic resources, i.e., dollars and people, and invaluable in providing the base data for qualitative review of programs. Furthermore, the Colorado Commission of Higher Education and other governmental agencies are increasingly interested in obtaining the kind of data that such a system provides.

C. Objective: Meet rising costs for essential equipment maintenance and supplies.

Request: $14,246 (Line 25 of format 454)
$21,885 (Line 33 of format 454)

Justification: Required maintenance and service costs and necessary supplies to operate have experienced a ten percent or greater inflation rate over the past three years. Adequate funding to meet these rising costs is critical to the daily operation.

DIVISION OF ADP RECOMMENDATION:
1.0 FTE requested for Objective B is not recommended. The institution should prioritize the need within the 4.5 programmer and 3.0 systems analysts now on the staff.

Objective C and 1.0 FTE under Objective A is recommended due to the extension of service facilities and current staffing is not adequate to meet the need.

ADP BUDGET ANALYSIS INSTITUTION UNIV OF SOUTHERN COLORADO NUMBER 270640 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	14.40	254,001	14.40	289,307	17.00	348,662	16.40	342,207	16.40	342,207
OPERATING EXPENSE		22,708		27,024		33,550		28,580		28,580
OPERATING EXPENSE OTHER		15,858		18,564		37,920		31,120		31,120
EQUIPMENT -										
EQUIPMENT RENTAL		59,384		74,626		138,818		105,038		105,038
EQUIPMENT C/O						817,900		135,000		135,000
EQUIPMENT SUB-TOTAL		59,384		74,626		956,718		240,038		240,038
TOTAL	14.40	351,991	14.40	409,521	17.00	1,376,850	16.40	641,945	16.40	641,945
GENERAL FUND	14.40	332,184	14.40	380,947	17.00	1,376,850	16.40	641,945		
CASH										
FEDERAL										
SALARY ACT		19,807		28,574						
OTHER										

ESTIMATE YEAR

1. Continue development of the Computer Plan in accordance with the University's Master Plan. The MIS Committee will review the process and make recommendations for improvements to the plan.
2. Continue to work with the State ADP Planning Coordinator.
3. Expand the interactive programs in the instructional areas, especially the new four-year Computer Science Technology Program.
4. Be able to service all departments as new requirements in their curriculum demand expanded computer usage, expecially in the Math and Science and Business areas.
5. Continue training the programming and operational staff in new technology methods.
6. Continue support to PVCC in the student and record keeping areas, until transition to their computer system is completed.
7. Acquire hardware enhancements that allow the Center to partially support the demand increased student usage has placed on the system.

REQUEST YEAR OBJECTIVES:

Objective: Advance the polytechnic thrust of the USC as provided for in the State Master Plan of the Colorado Commission on Higher Education by:

- o Increasing the availability and variety of education computing through implementation of an academic computing system.
- o Developing a unique place in the State in technical computer applications available for computer related instruction, research, and assistance to government and local industry.
- o Increasing the capacity and capabilities of administrative computing in a cost/effective manner.

Resources Required*

	Equipment	Maintenance and Operation
Hardware:		
Computer	230,000	15,600
Peripheral & Mass Storage	271,800	21,100
Terminals	128,200	13,540
Remote Job Entry	41,000	4,690
Graphics/Plotting	18,000	1,800
Software	88,900	6,800
Word Processor System	40,000	4,000
	817,900	67,530

	FTE	Salary & Benefits
Staff:		
Academic Coordinator	1.0	30,000
Programmer	1.0	20,400
Hourly	.6	5,400
		55,800

	Travel	Fees & Supplies
Training	2,500	3,000

* See Three-Year Plan for Detailed Equipment List.

Justification: Contemporary society is witnessing the advance of computing-related technology in all fields, The scientist uses computers in research and problem solving. Businesses use them for financial planning, forecasting and modeling. Governmental units need computing to record expenditures and analyze caseloads. Thus all facets of society including the scientist/technician, the farmer, the lawyer, the legislator, and the doctor are finding that computer applications are available to aid their efforts. USC requires new resources in order to train graduates who will be able to effectively take advantage of current and future computer technologies. The University's expanding role in applied research, particularly in dealing with concerns of government and industry in its geographic service area, also calls for more powerful computing facilities. The elements of USC's computing request will be integrated in a Computer Resource Development Center to support instruction, research, and service to government and industry, as appropriate in a technically specialized institution. Further, the administrative activity will become more productive with the increased computer capabilities.

o Computer Resource Development Center

The Basic System--this the foundation upon which the academic capability rests. It will enable expansion and enhancement over the next five years or more. It includes the basic input/output devices and storage and processing capacity necessary.

Terminal Equipment--this equipment will make a wider variety of computing capacity available to more students. Terminals will be placed in most academic buildings on campus and will allow students and instructors to work more closely in solving the problems related to the student's discipline. More and more banks, businesses, hospitals, and government agencies are involved in accessing computers through terminals. Therefore, this is the contemporary environment in which an ever increasing number of graduates will be working.

Plotting Equipment--"A picture is worth a thousand words" symbolizes the need of the market analyst, the economist, and the doctor for information in graphic form. This equipment will help the engineering technology student experiment with structural design, will allow the geology student to perform special mapping studies, will aid in training the computer scientist to provide visual output for their clients.

Remote Job Entry Equipment--provides availability from a site removed from the central academic computer, thus increasing access for students and instructors. The computer science student, the future engineering technologist, the manager can gain practical knowledge in designing and using telecommunications systems, each from the viewpoint of the individual's discipline. Additionally, this equipment will promote resources sharing with other campuses and agencies which have already developed some of the instructional material that USC requires to fill the polytechnic mission.

Software--as the hardware provides the power to process swiftly, software provides the instructions to accomplish a wide variety of activities. Software is the necessary ingredient to train future programmers. More than this, it is the means by which non-technical persons are able to use the power of the computer to increase their productivity. Software enables the lawyer to construct legal documents without laboriously retyping standard phrases. It enables the statistician to analyze data swiftly without the need to have a programmer write special programs. Software for USC is the element which will ultimately enable most graduates to make effective use of computers in their work in manner appropriate and efficient to that work. Essential software includes simulation, statistical, financial, and other packages in addition to the standard programming and information retrieval languages.

It will also be the software that establishes USC's unique capability in its polytechnic role for instructing students in technical computing applications, applying and developing special applications through research, and using USC's special computing capabilities to solve specific problems of government and industry in the State. Some software can be acquired at low cost. especially through sharing with other institutions across the country. Other powerful packages are costly and must be acquired over time after careful review of the need and benefits. Funds for these applications are not being requested at this time because the University expects to be able to secure them from other resources, including cooperative arrangements with business and industry. Some sample packages that DSC might review for acquisition are the following:

Package Name	Purpose	Applications
AQD	Interactive Statistical Analysis	Statistics, Mathematics, Science, Business, Engineering technologies. Social Sciences (Developed by Harvard Business School).
ASA	Project Management System	Project planning and management in Business and Engineering Technologies.
ASPEX	Automated Surface Perspectives	Mapping, Cartography, Planning, Data Analysis.
DYNAMO	Simulation Language for modeling dynamic systems and gaming	Many--All Fields. Examples: Life Cycle Costs of Equipment, Determinants of Corporate Growth, Dynamics of Criminal Justice System, Global Modeling, Physical Systems, Regional Modeling, Predater-Prey Dynamics, Hospital Management.
GENESYS	General Engineering	Engineering Technologies, expecially Civil Engineering Technology.
MATRAK	Matrix Manipulation	Math, Science, Engineering.

SYMAP	Mapping	Market Research, City Planning, Health Planning, Resource Studies, Demography.
The Top Management Experience	Business Simulation Program	Business Courses Seminars for managers.

o Staff

Academic Coordinator--this staff position is required to coordinate the services of the Computer Center with the academic staff. The duties of this person will be to contact, train, and work with academic staff to insure the systems that best serve the academic community are available on the computer.

Software Programmer--computer systems enable organizations to become more productive. This productivity involves use of increasingly sophisticated software as more data sharing occurs and client oriented systems are installed. To install, coordinate and optimize such a system necessitates increased services and expertise of software specialists. As the polytechnic areas become more computer oriented this position will have increasing involvement with the academic as well as the administrative system.

Hourly Wages--there are many areas of the Computer Center operation where student help is cost effective. Assisting students with programming problems, keypunching student programs, and performing simple computer operations such as mounting tapes are some of these. Additionally, use of students provides an ideal learning experience when they are involved in the daily operations of the Center.

o Adminstrative System

Many of the applications required for administration are in place. USC is working to improve the productivity and efficiency of those applications and to extend its applications capability to all administrative areas.

Administrative Computer Equipment--this includes new tape and disk systems. Antiquated equipment which is no longer cost effective must be replaced to increase productivity of USC's equipment and staff.

Software--software for administrative functions is essential to promote efficient management of computer resources. For example a high level information retrieval language is necessary to increase programmer productivity. Such a language will also enable non-programmer staff to generate many reports without having to involve programming, staff, thus, enhancing the total productivity of administration.

Training--staff is a very expensive resource. Obtaining the most production necessitates providing them with productivitiy tools and the knowledge of how to use those tools. While software and equipment constitute the tools package, training and knowledge will be derived from attendance at technical seminars and from specific training problems of the office.

Office Technology--between 1960 and 1970 productivity for blue-collar workers grew by 83% while white-collar productivity rose only 4%. The primary difference was capital investment in the blue-collar areas that was 12 times the white-collar capital investment. Computer technology is being applied to solving the productivity problems of the office.

Current office technology allows the secretary to make revisions of a document without complete retyping, and to store records for later recall. Productivity increases in the range of 2 to 5 times previous output are commonly experienced after the installation of modern office systems. USC's request is to provide the basic equipment to enter the modern era of office technology in a cost-effective manner.

Summary

To fulfill the polytechnic role, USC faces a stimulating task. The use of computer technology will play a vital role in accomplishing this task. All computing efforts are directed toward educating graduates who are able to function effectively and humanly in a technological society, and toward increasing the productivity of the staff of USC, instructors and administrators alike.

Projected Three Year Acquisition Cost

In order to present a more complete picture of the extent of USC's need in the computing area, a three year estimate of requirements follow, Due to influctuations in costs as technology advances, the impact of inflation, and, and the anticipated demand for computing services, figures are intended to estimate minimal requirements in the year of acquisition only. Thus some hardware costs will go down, and unanticipated software will be requested. All acquisitions should be cost effective either in quantitative terms as related to productivity in administrative systems, or in qualitative measures as related to improved educational capability for the polytechnic thrust.

While the request has been developed to show full first year purchase costs, the State has flexibility to spread these costs over a longer period, e.g., five years, reducing the one-year impact.

DIVISION OF ADP RECOMMENDATION:
The University of Southern Colorado has conducted an indepth institutional needs assessment of data processing support requirements based on its stated mission and role. This assessment has been translated into a very good long range ADP Master Plan. The Division of ADP approves and generally supports the directions and objectives set forth in the plan.

While the general equipment procurement intent to meet the overall need is supported by the Division it should be understood that specific detail items are not approved in total by this recommendation. Any differences in actual detail equipment items by the Division would not change the budget levels to meet the objective.

Conversely, the Division is not recommending the Office Technology Equipment portion ($40,000 C/O and $40,000 O/E) in the budget request year. The C/O request ($817,900) is therefore reduced to $777,900 and O/E is reduced ($67,530) to $63,530.

While the Division is supporting the intent of the program request. it is recommending different dollar amounts for fiscal implication.

The C/O amount of $777,900 is proposed as $135,000 per year under a 6 year pay plan. The actual equipment could probably not be acquired before December 1981. Therefore the maintenance costs to support this equipment is recommended at ½ year, ($33,750) for FY 81-82. A full year would occur in 82-83.

The academic coordinator (1.0 FTE) $30,000 and (1.0 FTE) new programmer $20,400 are recommended contingent on the new equipment appropriation. These positions would be needed under the plan for implementation of the new equipment. The (.6 FTE) $5,400 for hourly wages is not recommended.

ADP BUDGET ANALYSIS INSTITUTION WESTERN STATE COLLEGE NUMBER 270660 SCHEDULE 2

	1979-80 FTE/ACTUAL	$	1980-81 FTE/ESTIMATE	$	1981-82 FTE/REQUEST	$	1981-82 FTE/RECOMMEND	$	1981-82 FTE/ADV.BOARD	$
PERSONAL SERVICES	7.00	126,126	7.00	143,901	9.50	198,598	8.00	165,601	8.00	165,601
OPERATING EXPENSE		7,065		10,500		21,732		11,235		11,235
OPERATING EXPENSE OTHER										
EQUIPMENT -										
EQUIPMENT RENTAL		33,635		35,919		43,857		38,433		38,433
EQUIPMENT C/O		18,147		60,000		60,000		60,000		60,000
EQUIPMENT SUB-TOTAL		51,782		95,919		103,857		98,433		98,433
TOTAL	7.00	184,973	7.00	250,320	9.50	324,187	8.00	275,269	8.00	275,269
GENERAL FUND	7.00	179,180	7.00	237,988	9.50	324,187	8.00	275,269		
CASH										
FEDERAL										
SALARY ACT		8,302		12,332						
OTHER		-2,509								

REQUEST YEAR (1981-82) OBJECTIVES AND JUSTIFICATION

Compensation for Professional and Classified Personnel

Objective:
To provide computer personnel with sufficient compensation to prevent further reductions in their purchasing power.

Request:

A. 7% Limitation
Increase Compensation (Exempt) $ 2,607

B. Additional Actual Needs
Increased Compensation (Exempt) 1,304
(Classified) 1,670

Increased Funding $ 2,974

OPERATING EXPENSES:

Objective:
To provide adequate materials to maintain computing support for the instructional and administrative operations of the college.

Request:

A. 7% Limitation
To meet some of the costs of inflation.

Increased Funding $ 3,714

B. Additional Actual Needs
To provide funds for software and maintenance of terminals.

Increased Funding	$ 15,457

Justification:
A part of this request is to meet the demands of inflation on data processing supplies. The remaining amount is to pay the continuing costs of rent, maintenance, and software for existing equipment and for new equipment which is to be received in December, 1980.

New Positions

Objective:
To provide assistance necessary to enable many of our faculty and students to achieve a high level of competence on the computer and to provide systems analysis support for administrative and instructional programs.

Request:

A. 7% Limitation
None

B. Additional Actual Needs

1.0 Instructional Coordinator	$ 23,880
1.0 Systems Analyst	21,700
0.5 Hourly Wage Position	3,536
Increased Funding	$49,116

Justification:

Instructional Coordinator: With rapidly advancing computer technology we need a person to demonstrate the most innovative methods for use of the computer to faculty and students. In addition to having a background in instructional computing, this person must also be knowledgable in statistics, the sciences, graphics, and analog data conversion.

Systems Analyst: This person will assist users of the computer in developing their plans for services in such a way that programs and documentation can be developed. Although he does not have the time to do so, the Director of the computer center has been attempting to provide this service personally. The two most recent audit reports have suggested that he devote more time to systems design, management procedures, and control.

Hourly Wages: Since the computer center is available for use by faculty and students until late at night and on weekends, we must provide supervision during these extended hours. Qualified student hourly employees can provide this supervision and assist users of the facility.

COMMENTS/RECOMMENDATIONS:

PERSONAL SERVICES:
The Division of ADP supports the increase of 1.0 FTE Systems Analyst to provide the Academic users with the products and services as designated under the justification for Instructional Coordinator, and the design and implementation of Academic Systems/Applications as applicable.

OPERATING EXPENSE:
The amount of $11,235 is supported and reflects a 7% increase for inflation.

EQUIPMENT RENTAL:
The amount of $38,433 is supported and reflects a 7% increase for inflation.

EQUIPMENT CAPITAL OUTLAY:
There is no increase in the Capital Outlay which is a continuation for the installment purchase of the PDP 11/70 mini-computer system.